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AUTHOR	Arrasmith, Dean G.; Davis, Ann E.
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ABSTRACT

Information about the outcomes, processes, and context of teaching and learning are being used to plan and monitor school-improvement efforts in many schools. Meaningful information shared within a school community can effectively coalesce broad support for responsive school-improvement efforts. An information planner is being developed by the Northwest Regional Educational Laboratory to support the important use of school-community information captured in indicator systems. In order to help school-planning teams focus on potentially relevant indicators, the information planner will suggest sets of indicators keyed by the potential purpose and context of the school-planning teams using the system. This report includes the sets of indicators that will be included in the information planner for effective schools, rural schools, early-childhood programs, and education-to-work programs. The appendix contains characteristics of effective schools, possible indicators, and guiding questions for using information from indicators. (LMI)

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THE Northwest Regional Educational Laboratory

PROGRAM REPORT

ED 413 656

Indicator Sets for the Information Planner

Prepared by

Dean G. Arrasmith
Ann E. Davis
Assessment and Accountability Program

November 1996

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Northwest Regional Educational Laboratory
101 S.W. Main Street, Suite 500
Portland, Oregon 97204

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Prepared by

Dean G. Arrasmith
Ann E. Davis
Assessment and Accountability Program
Northwest Regional Educational Laboratory
101 S.W. Main Street, Suite 500
Portland, Oregon 97204

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INDICATOR SETS FOR THE INFORMATION PLANNER

Information about the outcomes, processes, and context of teaching and learning are being used to plan and monitor school improvement efforts in many schools. Increasingly school improvement teams are using information about the quality of instruction, the context and support of the schools, and, especially, the outcomes achieved by students to identify critical areas for needed improvement, and to monitor the effects of improvement efforts. Meaningful information shared within a school community (including administrators, teachers, students, parents, and other community members) can effectively coalesce broad support for responsive school improvement efforts. The Information Planner is being developed by the Northwest Regional Educational Laboratory to support this important use of school community information captured in indicator systems.

Ideally, a well constructed indicator system would provide information to the school community about the quality of a school or of a group of schools. The indicators would address critical questions about what students are accomplishing, how teaching is being conducted, and how the school(s) contribute to and support high quality teaching and learning. In addition, when viewed over time, indicators would illustrate trends or changes in the school(s), highlighting whether and where improvements were occurring.

Although many excellent reviews of indicators and indicator systems are found in the literature (e.g., Oakes, 1986; Rockwell, 1989; NCES, 1991; Edmond, 1992), however, there is limited discussion about the key sets of indicators related to specific school contexts and school improvement efforts. The diversity of schools and school improvement efforts requires that systems of indicators often need to be uniquely identified by the school community members. The Information Planner will allow and encourage school planning teams to specifically identify what indicators they will use to plan and monitor the effects of their efforts. The process of using information to guide school improvment, modeled and encouraged in the Information Planner, includes building support for the type of information to be used to plan and monitor school improvement and focuses discussion on the outcomes and further needs for school improvement efforts, initiating and ending a cycle of needs identification, planning, doing, and reflecting.

In order to help school planning teams focus on potentially relevant indicators, the Information Planner will suggest sets of indicators keyed by the potential purpose and context of the school planning teams using the system. This report includes the sets of indicators that will be included in the Information Planner for (1) effective schools, (2) rural schools, (3) early-childhood programs, and (4) education-to-work programs. Generally, the indicators are very similar for each of these areas, differing only in the degree of relevance placed on specific indicators. The indicators for rural schools, early-childhood programs, and education-to-work programs are presented as lists of the most relevant indicators from the comprehensive set identified for effective schools. The effective schools indicators, relevant for all schools, are identified directly from the

effective schools literature and are presented after a brief discussion of the pervasive focus on student achievement within most indicator systems.

STUDENT ACHIEVMENT

Improvement of student achievement is the central goal for all effective schools and permeates the criteria for effective schools. Improved student achievement is the *so what* of all of the criteria. School planning and goal setting; strong leadership and school improvement; school environment and climate that promotes learning; curriculum, instruction, and assessment; equity; and school/family/community partnerships and collaboration are predicated on improving student achievement. As a result of this central focus on student achievement, indicators of what students know and can do are expected to be included in nearly all indicator systems developed to assess the quality of schools and to monitor school improvement.

Indicators of student achievement need to include multiple measures of student knowledge, behaviors, and attitudes related to learning in general and achievement in specific content and skill areas. There needs to be a balance between generally focused achievement measures and specific student performances. Standardized, norm-referenced survey tests need to be supplemented with specific performance assessments to capture both the students' breadth of knowledge as well as what they can do. Additionally, assessments of attitudes about learning, in general, need to be balanced with specific attitudes about content and skill areas.

There are a wide range of assessment methods that can be used to provide information about student achievement. These include the nationally published achievement tests as well as the full range of performance assessment that require students to construct responses or perform. The Northwest Regional Educational Laboratory (NWREL) publishes content-based annotated bibliographies of many assessment methods that will be included in the Information Planner.

In support of assessment of what students know and can do, many schools are assessing students' attitudes toward learning, and appreciation and interest in specific content and skill areas. Surveys and other assessment of student attitudes, appreciation, and interests are included in NWREL's annotated bibliographies.

The Information Planner will provide guidance in selecting appropriate, multiple measures of student achievement. Criteria for selecting effective assessments will be provided and specific examples of multiple assessment methods will be offered. In addition, the Information Planner will provide links to technical assistance and training opportunities that encourage effective assessment of student achievement. The assessment of student achievement will provide a foundation for each school's indicator system.

EFFECTIVE SCHOOL INDICATORS

Review of the effective school literature, that literature which discusses what schools need to be and accomplish in order to support and produce high achievement for all children, suggests twenty criteria that schools should address and that indicators can assess and monitor. This structure of criteria of effective schools provides a useful way for organizing the indicators that many school improvement teams are likely to embrace and include in their indicator set. The following is a brief summary of the extended presentation of the effective schools indicators included in Appendix A.

It is expected that schools would review the following criteria for effective schools and select a few to focus their indicator system. Within the selected criteria, school improvement teams would review the possible indicators and begin to identify specific indicators that they believe would provide useful information about their needs and monitor their progress in addressing their needs. We recommend the set of indicators always include student achievement.

It is not expected that schools would initially profile all of the criteria of effective schools. However, over time schools may modify their indicator systems to focus on additional criteria and reduce their focus on criteria that have been well met. In this way, the effective schools criteria and the associated indicators can provide a specific focus for immediate planning and action as well as encourage broader consideration of the other criteria over time.

In the following presentation, the effective school criteria, indicated by number and bold type, are grouped into six general areas. Possible indicators are presented as bulleted lists following each criterion. A complete presentation of each criterion is presented in Appendix A.

SCHOOL PLANNING AND GOAL SETTING

Effective schools:

1. **Have inclusive decisionmaking processes for school planning and goal setting.**

- Quality of school decisionmaking - survey of teachers and administrators about decisionmaking processes within the school, processes to develop a shared vision, and mutual agreement and understanding about school plans and goals
- Types of decisionmaking structures within a school and types of decisions made via shared leadership
- Documentation of membership and members' professional position on teams, committees, councils, etc., records of members' attendance at meeting, number of meetings, meeting notes
- Training provided related to decisionmaking such as group process skills, legal requirements, school vision
- Participant feedback on training and decisionmaking processes

- Documentation of the process used to develop school vision, student standards, school improvement goals, improvement plans, timeline, implementation plans
- Documentation of school vision, student standards, school improvement goals, improvement plans, timeline, implementation plans

2. **Establish and work from meaningful, agreed upon student standards of what students should know and be able to do.**

- Articulated student standards that include workplace preparation and had the input from all key stakeholders
- Documented school plans including school improvement plans
- Plans for developing, implementing, or improving current transition programs that include:
    - Planning and coordination with the sending and receiving schools
    - Early communication with students and parents
    - Summertime schedules
    - Onsite orientation activities
- If an elementary school plans for an actual program that helps young children to transition to the kindergarten
    - Quality preschool experiences
    - Quality elementary school programs
    - Parent involvement
    - Continuum of family-focused and community-based services
    - Communication and collaboration between preschool and elementary school staff -teacher conferences
    - Preparation of children for transition to kindergarten

3. **Focus resources on established student standards and school improvement efforts.**

- Qualifications of teachers and administrators such as:
    - number of certified teachers teaching in their area (50% or more of the time)
    - number of certified teachers teaching out of their field
    - number of uncertified teachers
- Policies that support coordinated budget efforts and decisionmaking with student standards and school improvement goals
- Identification of resource needs related to student standards and school improvement in terms of
    - equitable use of resources
    - resource use for all learners
    - staffing
    - instruction
    - possible community resources
    - physical space

- School budget - school commitment to instructional resources
    - Flexibility in how funds are used for resources
    - Reallocation of budget funds to reflect school improvement efforts
- School schedule - supports teachers in accomplishing the content standards
- Broad base representation in resource selection
- Focus of resource selection and use on student content standards and school improvement goals
- Opportunities for staff to collect information on resource options and for staff development in selecting and using resources
- Procedures for teacher selection that target staff resource needs
- Providing time and incentives for teachers to learn and practice the skills they will need to successfully implement reform efforts

STRONG LEADERSHIP AND SCHOOL IMPROVEMENT

Effective schools:

4 **Have strong informed leadership that utilizes well established research to guide the instructional program.**

- Leadership undertakes restructuring efforts
    - Uses school data and inclusive decisionmaking to identify improvement needs
    - Studies restructuring efforts conducted elsewhere
- Leadership guides the instructional program and shows its commitment to improvement of instructional programs in ways such as:
    - Facilitating staff discussions about research based practices and possible adaptations
    - Showcasing effective practices that are noted during classroom observations or models effective practices in the classroom
    - Encouraging staff to observe each others classrooms by offering to take over teachers' classrooms
- Written and collaborative school mission
- Involvement of staff and community in developing instructional improvement plans
- Documented instructional improvement plans based on explicit student performance and student standards
- Visible demonstrations within the school that student learning is highly valued and important
- Curriculum documentation
- Staff supervision protocols that include clear criteria for judging teacher content knowledge, pedagogical skill and assessment sophistication
- Assessment competencies for principals

5. **Strive to improve instructional effectiveness as part of an ongoing school improvement process.**

- School Profile that includes
  - contextual information
  - student performance information appropriately disaggregated
  - community and staff involvement
- Documentation of a School Improvement Plan
- Demonstrations of broad-based involvement in developing the plan such as a list of participants and respective positions who worked on developing improvement goals, documentation of the process of inclusive decisionmaking
- Documentation of an Implementation Plan with accompanying timeline
- Documentation of school's progress in meeting improvement goals such as data supporting progress

6. **Involve staff, administrators, parents, families, and businesses in ongoing staff development that is focused on student content standards and school improvement goals.**

- Shared school vision of learning
- Strong and active schoolwide professional community that has:
  - established norms of collegiality and discourse
  - support for staff learning - teachers support each other in adapting instruction to meet students' learning needs; they develop teaching strategies together
  - opportunities for staff innovativeness - teachers seek changes and value changes as a way to serve children better
  - professional commitment to students, subject, school, and profession

- Teachers' attitudes, perceptions, and adaptation patterns to meet the challenges of today's students
- Structures that support work toward school improvement such as: organizational arrangements, roles and formal policies, time for joint planning, joint teaching arrangements, staff development policies
- Documentation of ongoing staff development and its connection to school improvement goals and student content standards.
- Descriptions of staff development programs including input from teachers, content, structure, and delivery of staff development. These are: clearly articulated; support workshops through teacher practice, discussion and learning teams; focused on school improvement goals and student content standards

SCHOOL ENVIRONMENT AND CLIMATE THAT PROMOTES LEARNING

Effective schools:

7. **Assure that school time is used for learning.**

- Policies that protect the use of time
- Organization of the school calendar
- Parent and student reports on homework quality
- Number of school hours devoted to academic work, number of hours devoted to non-academic activities such as assemblies, social events on a monthly basis, number of hours students are pulled out of class for other services, etc.
- Classroom use of time
    - smooth transitions
    - ending on time
    - classroom disruptions of any kind
    - amount of academic learning time (ALT), students' reports about their thought processes when engaged in learning activities to determine the quality of learning activities. (When students' thoughts are focused on "I can do it," and "here's how I can do it," achievement results are superior to those produced by thoughts unrelated to the task or reflect anxiety about the task.)
- Number of office referrals during class time

8. **Hold high expectations for students, teachers, and administrators that are set and communicated to families, teachers, and students and provide incentives, recognition, and rewards to promote excellence.**

- Goals that are expressed as minimally acceptable levels of achievement rather than using prior achievement data to establish ceiling levels beyond which students would not be expected to progress.
- Policies and practices that underscore the importance of reading. For example effective schools have written policies regarding the amount of time spent on reading instruction daily, frequent free reading periods, use of a single reading series for continuity, homework that emphasizes reading, frequent sharing of student reading progress with parents, and strong instructional leadership.
- Measurements of wait time during administrators class observations
- Staff members who hold high expectations for themselves as leaders and teachers, taking responsibility for student performance.
- Slogans that communicate high expectations.
- Positive learning climate such as the appearance of the physical school and the sense of order and discipline that pervades both instructional and noninstructional areas.
- Insistent coaching or assistance of students who are experiencing learning difficulty
- Written teacher evaluation procedures
- Routines for teachers with instructional concerns
- Characteristics of student-centered classrooms

9. **Establish, communicate, and enforce consistent, fair discipline practices and policies.**

- Expulsions and out-of-school suspensions
- Tardiness and absenteeism
- In-school suspensions
- Discipline referrals from teachers
- Preventive approaches or programs
- Written code of conduct that articulates rules, sanctions, and procedures

10. **Provide supportive and physically safe environments.**

- School Climate Inventory Instrument administered periodically (once every 2-3 years) to collect data from teachers and students; instrument based on current best thinking about quality school and classroom climate
- Number of staff, students, parents, and community members involved in developing a school mission statement/shared vision
- Data on student violent acts, suspensions, expulsions, and disciplinary actions
- Number of disciplinary referrals by grade level, gender, S.E.S. and racial/ethnic groups
- Widespread approval of the process for handling conduct violations in school
- Programs and support to help high-needs students to achieve school success
- Extent that referrals for health/social services and other assistance services are coordinated
- School leaders and staff collaboration with community agencies to support families with urgent health and/or social service needs
- Attendance at open-houses, back-to-school night, student conferences
- Tabulating and tracking parent/community volunteerism
- School-community liaison exists and is used to foster community outreach
- School-business-community partnerships are used to support instructional effectiveness

11. **Provide an electronic community for instructional support and classroom activities that simulate real life/workplace situations.**
Note: The impact of an electronic community is not rapid. Changes must be measured over time with attention to the way technology is used in the school.

- Traditional standardized tests (*California Achievement Tests, Iowa Tests of Basic Skills, Watson-Glaser Critical Thinking Appraisal, Test of Cognitive Skills*) and appropriate performance assessments
- The *Student Attitudes Toward Education and School* (Texas Center for Educational Technology) -- an instrument to measure changes in student attitudes
- *Student Attitudes Toward Technology* (Texas Center for Educational Technology) -- measures student acceptance of technology
- Depth of training in technology for teachers, support staff and administrators
- District/school computer support services
- Extent to which technology is used district-wide (age and number of computers plus Internet connections, administrative and library use)

- Teacher use of computers as tools for problem-solving, within subject areas, workplace simulations, reducing instructional problems
- Parent and family survey
- Measures of business and community perception of worker readiness
- Nature and amount of computer use by students per week, term, year

CURRICULUM, INSTRUCTION, AND ASSESSMENT

Effective schools:

12. Plan curriculum, instruction, and assessment based on clear student standards and objectives.

- Curriculum planning guide and/or written curriculum framework addressing student standards, academic focus, thinking skills focus, instructional strategies, assessment strategies, group process skills, cultural awareness, school-to-work, technology, family communication, and program and service coordination
- Evidence of curriculum alignment with student standards, instruction, and assessment
- Plans for curriculum integration within the school or implementation of curriculum integration
- Student performance and community profiles
- Plans and designs such as blueprints for school and classroom assessments
- Teachers know the targets of instruction: can list and explain them; can trace their development through units of instruction

13 **Have classroom and instructional strategies that are used to support and promote student learning to attain student standards.**

- Classroom climate reflects current thinking about how students learn
- Strategies, approaches and programs for supporting high needs students within the school and classroom

  Commitment of resources

  Instructional materials and resources, in addition to textbooks, that support the curriculum and instruction

  Allocated resource budget by grade level/content area/themes
- Standards of authentic instruction (quality of instruction)
  - higher-order thinking skills
  - depth of knowledge
  - connectedness to the world beyond the classroom
  - substantive conversation
  - social support for student achievement
- Curriculum integration - sample integrated, thematic units with accompanying learning activities such as projects, student grouping, etc. and student assessments

14. Use multiple methods to assess student performance.

- Professional development focusing on assessment
- School profiles of student achievement disaggregated by grade level, gender, and ethnic group
- Align curriculum, instruction, and assessment with clear instructional standards
- Consistency and continuity of alternative assessment scoring guides within and across grade levels (i.e. if a school is using the six trait model for assessing writing, then the model is used consistently among classes within a grade level and across grade levels)
- Quality of classroom assessments
- Clear and appropriate purpose for assessment
- Target and method match
- Sources of mismeasurement identified and changes made, including multiple measures
- Teachers use sound grading and reporting practices

EQUITY

Effective schools:

15. Promote mutual respect, understanding, and appreciation for diversity among students, teachers, administrators, families, and community members of different socio-economic status (SES) and cultural backgrounds by embracing the key concepts of equity to help them eliminate bias and discrimination in the context of day-to-day activities.

- School attendance
- Differences in levels of curriculum and instruction for low income and/or minority students
- Grade retention
- Grade distributions
- Graduation rates
- Students use of technology and their participation in "high stakes" computer activities
- Student assessment information including performance-based assessments such as writing samples, portfolios, projects and traditional assessment (i.e., standardized tests)
- Graduates in post-secondary education and training
- Instructional group assignments, course, and class enrollment
- Enrollment in different school programs such as special education, Title I, accelerated programs, etc.
- Parent, family, and community participation in school planning and in activities
- Student participation in extracurricular activities

16. Provide programs and support to help high needs students achieve school success.

- School attendance
- Dropout rates
- Grade retention
- Class size
- Grade distributions
- Graduation rates
- Students use of technology and their participation in "high stakes" computer activities
- Student assessment information including performance-based assessments such as writing samples, portfolios, projects and traditional assessment (i.e., standardized tests)
- School improvement plan includes commitment of resources to support high needs students
- Instructional group assignments, course, and class enrollment
- Enrollment in different school programs such as special education, Title I, accelerated programs, etc
- Parent, family, and community participation in school planning and in activities
- Student participation in extracurricular activities
- Positive school climate
- Community collaboration

17. Provide non-English-speaking (NES) and limited-English-proficient (LEP) students with a strong academic core program that supports students' first language.

When reviewing information on indicators, the information should be broken down into students currently in LEP programs and exited LEP students. Possible indicators include:

- School attendance
- Grade retention
- Grade distributions
- Graduation rates
- Drop-out rates
- Procedures for identification and selection of students to special education
- Regular classroom participation during and after exiting LEP program
- Students use of technology and their participation in "high stakes" computer activities
- Student assessment information including performance-based assessments such as writing samples, portfolios, and projects; traditional assessments (i.e., standardized tests); and English language proficiency
- Training of LEP program staff
- Instructional group assignments, course, and class enrollment
- Enrollment in programs such as special education, and Title I and length of assignment

- Parent, family, and community participation
- Student participation in extracurricular activities

SCHOOL/FAMILY/COMMUNITY PARTNERSHIPS AND COLLABORATION

Effective schools:

18. Establish partnerships with their constituents (parents, families, businesses, and other community members) and work to create various types of involvement that promote a variety of opportunities for the school, families, and community to work together.

- Parent/community involvement is continually monitored and evaluated by activities and number of volunteers.
- Written policies which emphasize the importance of parent involvement and provide ongoing support to parent involvement efforts.
- Various avenues of communication (handbooks, newsletters, classroom updates, phone, conferences) used by the school
- Programs available to cultural minority parents and community members to help children cope with any differences in norms noted between the home and the school.
- Parent surveys or interviews and results are provided to parents and community members periodically.
- Education, health and social service agencies meet and coordinate services
- Education, health and social service agencies' policies and practices to actively involve families
- Extensions of learning that go beyond school walls
- Documentation of parent and family involvement in decision making
- Community partnerships support learning in the context of the school, community and home
- Action plan for continued development and evaluation of partnerships
- Documentation of student work experiences provided by community businesses.

19. Collaborate with agencies, businesses, and the community to support special programs for high needs students and families.

- Process for identification of high needs students, continuous monitoring
- Process for administrators and teachers to identify drop-out prone students and implement activities to keep them in school?
- Number of families and students with health and/or social service needs and program that helps them
- Data on tobacco, alcohol, and drug use among students and trends
- Tracking of referrals, incidents of crisis intervention, absenteeism
- School policy on tobacco, alcohol, and drug possession, use, and sale
- Involvement of agencies, businesses, and community organizations with schools to support needy students and their families with health and/or social service needs

- Partnerships focus on long-term collaboration, involving planning, assessment and clear communication
- School improvement plan includes commitment of resources to support high needs students

20. Promote community connections and cross-cultural communications with parents and families.

- Tracking of cultural/ethnic/language groups
- Attendance and graduation rates
- Types of School-Family-Community partnerships
- Review board to assure curricular resources are free from gender, racial, ethnic, or other biases
- Professional development opportunities for increasing cultural awareness
- Administrative support for professional development, training materials, parent programs
- Needs sensing conducted through planning meetings, surveys, phone interviews, or neighborhood meetings
- Participation in school-wide events, conferences, parent meetings and in extra-curricular student activities
- Multicultural policies/guidelines
- Positive student self-esteem, pride, confidence in personal capabilities
- School-family newsletters, parent handbooks, invitations are printed in home languages
- Criterion-referenced/authentic assessments/portfolios

Rural School Indicators

The effective schools criteria and indicators provide a valuable focus to be considered by rural schools. However, overlying the criteria and indicators are the special context and issues facing rural schools that need to be considered in selecting and developing an appropriate indicator system for a rural school. Rurality, in essence, is a measure of population density -- the interaction between size of population and size of geographic area. Rural is defined as towns or villages of 2,500 people or less, or in unincorporated areas (Stern, 1994). Rural schools typically have an enrollment figure of less than 300 students. Both size and geographical isolation interact to place special demands and concerns on rural schools.

These demands and concerns include the following.

Small enrollment and breadth of curriculum and support services -- effects the availability of resources effect the ability of many rural schools to provide a broad and appropriate set of curriculum and support services for students. The availability of qualified staff and facilities can limit the course offerings. Often teachers are teaching outside their certification in order to provide broader course offerings and experiences for students.

Small enrollment can also effect the availability of support services provided by school Administrators, special educators, counselors, nurses, librarians, instructional assistants, custodial staff, office clerks, and curriculum specialists in communication arts, mathematics, science, social studies, art, physical education, music, foreign language, computers, and speech. The types and participation in student extracurricular activities are also impacted by small enrollment and isolation in rural schools.

Small enrollment and reporting indicators -- Small student enrollment also effects the availability and quality of indicators information about student achievement. Because of the small enrollments in many schools and grade-level, student achievement information cannot be disclosed without risking disclosing individual students information. This is particularly problematic when disaggregating data to identify specific needs.

Small enrollments also effect the stability of longitudinal estimates of student performance. Individual student performance on assessments, both survey assessment as well a performance assessments, can greatly impact the estimates of overall school performance. Uniquely high or low performances can hide overall trends in student achievement. Rolling averages of student performance can be used to smooth out unexpected high or low performances in school level data, but with the price of delaying detection of changes in student achievement trends.

Balance of curriculum -- Many rural communities are undergoing substantial change in their local economy. In the Pacific-Northwest, many communities are moving away from

economies based on timber and other natural resources and transitioning to new economies. Schools in these communities need to be closely linked to the community and reflect the skills needed as the economy changes. The dilemma often faced in rural schools is the balance between focusing on the local economy needs and preparing students for broader skills demands that may pull the students away from the community.

The availability and qualifications of teaching staff, also limits the responsiveness to curriculum changes. Often significant staff training is required to modify the course offerings and curriculum in rural schools as community needs change.

Limited technology -- Many rural schools are relying on increased use of technology to address many of the issues of small student enrollments and isolation. However, many schools in the Northwest remain without adequate facilities to use technology in effective ways. Schools are often not wired for computer networks, adequate telephone lines do not exist for connection to the Internet, and distant education programs are often limited.

The above identified demands and concerns of rural schools highlight many of the criteria for effective schools. Rural schools are likely to focus on the following criteria:

2. Establish and work from meaningful, agreed upon student standards (that reflect desired community development)

6. Involve staff, administrators, parents, families, and businesses in ongoing staff development that is focused on student standards and school improvement goals

11. Provide an electronic community for instructional support and classroom activities that simulate real life/workplace situations.

12. Have classroom and instructional strategies that are used to support and promote student learning to attain student standards.

18. Establish partnerships with their constituents (parents, families, businesses, and other community members) and work to create various types of involvement that promote a variety of opportunities for the school, families, and community to work together.

19. Collaborate with agencies, businesses, and the community to support special programs for high needs students and families.

20. Promote community connections and cross-cultural communications with parents and families.

While these effective schools criteria may have special interest for many rural school, staff developing indicator systems should consider all of the criteria in selecting the few criteria they will focus attention on and develop indicators for. The demands and issues facing most rural schools need to be reflected in the selection of specific criteria and indicators.

SCHOOL-TO-WORK PROGRAMS

For schools improvement teams interested in developing indicators of their school-to-work programs, the criteria and indicators of effective schools offers a framework in which to begin their review and identification of key indicators. School-to-work programs are likely to focus attention on four areas, (1) the inclusion and integration of job-related competencies into the school curriculum and teachers instruction, (2) the assessment of student attainment of job-related competencies and students eventual job market success, (3) the availability of qualified staff and facilities in which to teach job skills, and (4) the formation of business partnerships to provide students with work-related experiences. The following section includes a discussion of how these areas of attention can be addressed within the criteria for effective schools.

These area are reflected in the following criteria for effective schools.

2. Establish and work from meaningful, agreed upon student standards.

- Articulated student standards that include workplace preparation and had the input from all key stakeholders

Increasingly, schools are seeing job-related competencies not as separate curriculum addressing the need of select students, but as a complementary and integrated set of skills that address universally desired knowledge and skills for all students. These knowledge and skills build on and contribute to the more traditional knowledge and skills and should be reflected in the agreed upon student standards. As standards, curriculum and assessments are aligned, job-related competencies will need to be included in the assessments of student achievement.

11. Provide an electronic community for instructional support and classroom activities that simulate real life/workplace situations.

- Measures of business and community perception of worker readiness

Electronic communities can be used to help students have broad access to information and experiences that help develop job-related knowledge and skills. In addition, the skills to use technology have become important job-related skills for many areas of employment. This criteria and indicator capture both the instructional use of technology and the development of skills in using technology.

18. Establish partnerships with their constituents (parents, families, businesses, and other community members) and work to create various types of involvement that promote a variety of opportunities for the school, families, and community to work together.

- Documentation of student work experiences provided by community businesses.

School-to-work programs are often focused, in part, upon building strong partnerships between the schools and business to provide an effective transition between school and

work. Students are prepared to be successful in jobs and have the knowledge and skills required by employers. This coordination and articulation of job-relevant skills requires strong partnerships between the school and businesses.

Business partnerships can also be used to provide students with job experiences that further prepare them for employment success. Job shadowing, internships, and other job experiences can be encouraged through school and business partnerships.

In building an indicator system for school-to-work programs, these few criteria of effective schools need to be especially considered by planning teams, within the context of the entire set of criteria.

Early-Childhood Programs

There are three areas of special concern for early-childhood programs among the effective schools criteria (1) transition of students into kindergarten and early-elementary grades, (2) involvement of families in education, and (3) the social, emotional, and cognitive development of young children. Each of these areas provides a focus for reviewing and identifying appropriate indicators for improvement of early-childhood programs.

These area are reflected in the following criteria for effective schools.

2. **Establish and work from meaningful, agreed upon student standards.**

- If an elementary school, then plans for an actual program that helps young children to transition to the kindergarten:
    - Quality preschool experiences
    - Quality elementary school programs
    - Parent involvement
    - Continuum of family-focused and community-based services
    - Communication and collaboration between preschool and elementary school staff -teacher conferences.
    - Preparation of children for transition to kindergarten

Indicators of how schools plan for the transition of young children into kindergarten are critical for encouraging programs that address the seamless development of children. Transition from pre-school programs or from home to kindergarten and early-elementary grades can be a very difficult situation for some students and families. Understanding the quality and focus of preschool experiences for the majority of students, matching the quality and focus of early elementary school programs can help minimize the discontinuity between the programs for young students. Continuing high levels of parent involvement, and providing and coordinating family-focused and community based services that support families with young students can also help encourage a smooth transition for the students and parents.

A critical component of transition between preschool or home experiences and kindergarten is the alignment and continuum of the social, emotional and cognitive development for the young student. This development is articulated and supported in clear, appropriate student standards that reflect the beliefs and desires of the school community and that are well founded in the research on early-childhood development. The key component to be reflected in the indicators is the consistency of the curriculum across and within development levels.

18. Establish partnerships with their constituents (parents, families, businesses, and other community members) and work to create various types of involvement that promote a variety of opportunities for the school, families, and community to work together.

- Various avenues of communication (handbooks, newsletters, classroom updates, phone, conferences) used by the school
- Education, health and social service agencies meet and coordinate services
- Education, health and social service agencies' policies and practices to actively involve families

Indicators of early-childhood programs must encourage active parent involvement in the educational lives of their young children. Developing strong partnerships with parents, finding meaningful roles for parents schools and in the education of their young children, coordinating education, health, and social services for families and students all contribute to and encourage active parent involvement.

Among the criteria of effective schools and the associated indicators, early-childhood programs need to especially focus on the quality of the transition of students into elementary schools, the active involvement of and services for families, and the continuous social, emotional, and cognitive development of students.

SUMMARY

The identification of indicators for school improvement has focused on the criteria associated with effective schools. We are compelled to encourage school planning teams to review all of the criteria in order to identify the most relevant criteria for their purpose. We have identified some criteria that may be of particular interest to rural schools, school-to-work programs and early-childhood programs. Other programs are likely to find highly relevant criteria among the criteria of effective schools. The review included in this report provides a very effective foundation for the Information Planner that is likely to be useful for many schools and programs.

Appendix A

Criteria for Effective Schools
or "Characteristics of Effective Schools"

SCHOOL PLANNING AND GOAL SETTING

1. Criteria: Effective schools have inclusive decisionmaking processes for school planning and goal setting.

What the Research Says: Effective schools use inclusive decisionmaking processes and structures within their schools to secure support and to strongly promote buy-in and ownership of school plans, improvement plans, and student standards. Without such support, school improvement planning and goal setting are less likely to positively impact student learning and their attainment of student standards. Decisionmaking structures such as committees, teams, councils include a broad base of members representing key stakeholders such as administrators, teachers, other school staff, students, parents, family members, business partners, and other community organizations and members. Decisionmakers have a clear understanding of the type or scope of decisions they are responsible for making. When all parties are not able to participate as one decisionmaking body, channels of communications are identified and used to disseminate information regarding upcoming decisions or decisions that have been made. Plans and changes are more likely to last longer when inclusive decision making processes are used. In addition, because changes and improvements take time, broad representation enables the continuity of planning and goal setting.

Because of its effectiveness in promoting and implementing schoolwide change, inclusive decision making is an essential process in several different school improvement models such as 1) school-based management teams or councils in the Onward To Excellence (OTE) process, 2) Coalition of Essential Schools (CES), and 3) Levine's Accelerated Schools model.

Using Inclusive Decision Making:

School-based Management Team - Onward Towards Excellence (OTE)	*Coalition of Essential Schools (CES)*	*Accelerated Schools Models*
School-based management teams lead the OTE process. Effective teams members: • have district support to make school-level decisions • are broadly representative, including supportive administrators, teachers, other staff, parent and community members, and students • communicate to constituents what school-based management is and secure their support • function as a true decision-making body rather than advisory • make school-level decisions that are in keeping with legal mandates and school/district goals • have been provided with training in legal requirements, school operations, and group	The Coalition of Essential Schools is based on Sizer's Nine Common Principles for School (1984). The Nine Common Principles (recently rephrased by Sizer) include: Focus on Intellectual Development: focus on the resourceful use of the mind by • focusing on a limited number of essential skills and subject matters - there must be more emphasis on deep understanding rather than the effort to cover subject matter • awarding a high school diploma only when a student exhibits the quality and breadth of intellectual performance worthy of that recognition • learning by doing engaging work	The concept behind Levine's accelerated schools is that to improve student learning does not lie with remediation but acceleration. At the heart of accelerated schools is a focus on providing powerful learning experiences for all children by stressing the development of higher-order thinking skills, providing interdisciplinary connections across common themes of inquiry, offering subject matter that is relevant to students' lives, and encouraging students to be active participants in shaping their learning. The Accelerated Schools process begins with all staff sharing the concepts and processes through training. Parents and community members are encouraged to join in this process. The school

process skills • assume decision making responsibility gradually - one area at a time • involve teacher participants in decision making about their areas of expertise and avoid involving them in relatively trivial administrative matters • receive recognition for the increased effort that school-based management requires of participants	Focus on Sense of Community: • Goals must apply to all children • Teaching and learning has to be personalized • Schools must be self-consciously decent places • Principals and teachers should themselves model the rich general education expected of students, even as they simultaneously are experts in one or more discipline. Teachers should expect multiple obligations and sense of commitment to the entire school. Essential to restructuring and school improvement based on this model is the inclusion of the entire faculty from the onset. They should be part of the process of developing the vision, understanding the common principles, and determining how to carry them out. Even if the actual changes may not affect the whole school right away, the whole school needs to be part of the initial planning. Success is dependent on full staff involvement with the ultimate goal of whole school change. If work is overseen by a steering committee, there must be constant communication with the rest of the faculty.	creates a school vision with the input from key stakeholder groups including students, parents, community members, teachers and administrators and takes stock of where it currently is. Taking stock involves generating areas of focus, forming work groups to generate questions, designing data collection, collecting and analyzing data, and finally presenting the information. The school reflects on the information before setting school priorities. A Steering Committee, comprised of broad base representation from the school as a whole, is formed as well as cadres, thus creating the governance structures needed to promote the accelerated school model for school improvement. Using the inquiry process, the cadres pursue the school priority areas, reporting back findings to the Steering Committee and the whole school community.

Example from Alaska: During 1995-96, several Alaskan school districts, Yupiit and Southwestern districts, began undertaking a special form of the OTE process to improve their children's education. The Alaskan OTE (AOTE) process has expanded the concept of inclusive decision making in order to better overcome the barriers faced by rural Alaskan villages. Because of the unique geography, high staff turnover, large size of districts, and the difficulty in traveling between villages, AOTE blends district and school-based improvement processes. Because of such barriers, there is a need to have a strong community leadership to carry on improvement efforts and to provide a sense of history and stability. Taking this into account, there is an upfront expectation that at least 50 percent of the leadership teams will be parents and native Alaskans. The district sends a two-person team from the district and a two-person team from each village to the facilitator training. These teams include an educator and a village person. The facilitator teams then work with district and village leadership teams. In the Yupiit School District, the village leadership team is made up of elementary and secondary principals, local school board member, teachers, parents, and aides. The district leadership team is composed of three regional board members, three advisory board members, one teacher, one principal, one aide, and the superintendent. Each village leadership team conducted village meetings to determine what residents wanted and expected from their schools. The four leadership teams then adopted student learning goals based on community input.

Examples of student learning goals included:

- Know the way of life and history of Yup'ik families; learn what is important from the outside world to live and function in both cultures. Students shall become best
- Have respect and a positive attitude toward life and learning, school, self, and a harmonious community.

educated Yup'ik hunters, fishers, and gatherers in the world
- Achieve learning and understanding to be prepared for education and work.
- Become law abiding citizens regardless of where one lives. Develop communities where people care for each other and share with each other.
- Develop the ability to read, write, and speak the Yup'ik and English languages.

Community members are sharing school leadership and have taken the responsibility for ensuring and maintaining continuity within their schools.

Possible Indicators:

1. Quality of school decisionmaking - survey of teachers and administrators about decisionmaking process within the school, process to develop a shared vision, and mutual agreement and understanding about school plans and goals
2. Types of decisionmaking structures within a school and types of decisions made via shared leadership
3. Documentation of membership and members' professional position on teams, committees, councils, etc., records of members' attendance at meeting, number of meetings, meeting notes
4. Training provided related to decisionmaking such as group process skills, legal requirements, school vision
5. Participant feedback on training and decisionmaking processes
6. Documentation of the process used to develop school vision, student standards, school improvement goals, improvement plans, timeline, implementation plans
7. Documentation of school vision, student standards, school improvement goals, improvement plans, timeline, implementation plans

Guiding Questions in Using Information from Indicators:

A. How are decisions made within the school? How participatory is decisionmaking? What structures (e.g., school-based management team, site council, committees, sub-committees, other teams) have been set up for decision making?
B. What types of decisions are made by these structures? Are decisions always carried out?
C. Who participates in decisionmaking? Is it inclusive/broad-based or only a select few? Are multiple stakeholders/groups represented?
D. How are decisions to be made or made communicated within the school and to concerned people outside of school?
E. What training was provided to decisionmakers? How were training needs identified?
F. What process was used to develop the school vision, student standards, school improvement goals, improvement plans, etc. and how does the school know that there is agreement among all concerned stakeholders?
G. Is there documentation of the school' vision, student standards, improvement goals and plans, timelines, and implementation of plans? How far along is the school in developing these?
H. Do administrators, teachers, student, and community members understand and agree with the school vision, student standards, and improvement goals?

Citations: 23

Arterbury and Hord (1991); Bachus (1992); Caldwell and Wood (1988); Cistone, Fernandez, and Tornillo (1989); Conley and Bacharach (1990); David (1989); Hord (1992b); Jackson and Crawford (1991); Levine (1991); Levine and Eubanks (1992); Louis and King (1993); Malen and Ogawa, (1988); Malen, Ogawa, and Kranz (1990a,b); Mojkowski and Fleming (1988); Odden and Wohlstetter (1995); Short and Greer (1993); Taylor and Levine (1991); White, P. A. (1989); Wohlstetter, Smyer, and Mohrman (1994)

SCHOOL PLANNING AND GOAL SETTING

2. Criteria: Effective schools establish and work from meaningful, agreed upon student standards.

What the Research Says: In an effective school, everyone in the school community emphasizes the importance of learning. When setting student standards and school policies, schools emphasize academic achievement and develop mission statements, slogans, mottoes, and displays that highlight the school's academic learning standards. The most important criteria for making decisions is the focus on student learning considerations and connection to student standards. Effective schools employ an inclusive process to establish student standards and objectives that are clearly defined. Student learning goals and objects are prominently displayed. Administrators and teachers base curriculum planning on clear student standards and objectives.

Among student standards, workplace preparation is included. Effective schools recognize the importance of developing employability skills in all students, regardless of their postsecondary plans. Administrators and teachers ensure that students develop the higher-order skills in demand in the modern workplace such as problem-solving and decision-making skills, learning strategies, and creative thinking. Special emphasis is placed on the development of qualities required for workplace success such as dependability, positive attitude toward work, conscientiousness, cooperation, adaptability, and self-discipline. In establishing learning activities, classroom design, and instructional approaches, teachers are given considerable autonomy by the school. At the secondary level, students are provided with assistance in preparing and updating their written career plans to identify their future educational and occupational directions. Students are also provided with opportunities to reflect on their workplace preparation experiences at school and in the community. When possible, the curriculum is integrated across different content areas. Emerging research is indicating the effectiveness of integrating workplace skills across the curriculum as a promising strategy for addressing high-order thinking skills that current employers want and future workplaces will require.

In school planning, transitional programs for entering and exiting students are developed to assist students and their parents in smooth and successful transitions. Transitions can be both frightening and apprehensive on the one hand and exciting on the other hand for both students and parents. Emerging research indicates that transitions can negatively affect students' academic performance, self beliefs about competence, self-esteem, GPAs, and class preparation across ethnic and gender groups. Additionally, parents and families need to be involved in successful school transition programs. Planning and coordination of transition programs should be done cooperatively between sending and receiving schools. The major components of successful transition programs seem to be: 1) planning and coordination with both sending and receiving schools, 2) early communication with students and parents, 3) summertime scheduling, and 4) onsite orientation activities. Some transition programs provide a continuous program throughout the year for students in the "rising" grade. All programs seem to share information at critical times for students and parents.

Examples of Effective Transition Program Practices and Approaches:

Early childhood to kindergarten transition programs: Early childhood transition services are important to ensure continuity for young children across a variety of environments and activities. There is a need to focus special attention on schools serving a high proportion of low-income students. Low-income children are less likely to have had preschool experience prior to school entry and are more likely to have difficulty adjusting to kindergarten. The components of effective transition services include:

- Quality preschool experiences in which staff is trained in developmentally appropriate practices
- Quality elementary school programs that provide curriculum and instruction that are developmentally appropriate and integrated across subject areas
- Parent involvement that promotes parent education, involvement, and empowerment at both the preschool and elementary school levels. Schools need to make special efforts to reach out to families whose children are not enrolled in early childhood programs through home visits prior to school entry.

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- Continuum of family-focused and community-based services that provides a network of community services available on site or by referral to continue the health and social services currently available in comprehensive preschool programs. Family support plans are another option for ensuring that families receive all the services they need.
- Communication and collaboration between preschool and elementary school staff that includes record sharing, exchange visitation, and discussion of individual children's progress as well as encourages joint planning, joint staff development and joint parent-teacher conferences.
- Preparation of children for transition that includes scheduling visits to the elementary school, planning for transition through discussions, dramatic play, reading books, and having a kindergarten student and/or teacher visit early childhood programs. Other ways to ease the transition is to phase in new students in small groups and providing individual transition plans for children.

Elementary to Middle School Practices: Many of the practices listed below are applicable for middle-to-high school transition programs and vice-a-versa for those listed under middle-to-high school programs. The important factor is that these practices are part of a well designed transition program that incorporate the major components outlined in the above research summary.

- Creation of special articulation or task force teams with the inclusion of parents and families to pay special attention to the academic, psychological, social, and emotional needs of students and to needs of parents.
- Constant membership classroom groups. In the middle school, entering students are randomly assigned to groups of about 25 and stay with this group for their core classes. They do mix with other students at lunch and in elective classes. Such groupings have been called "pods" or "houses."
- Slide or video presentations that is developed as part of the high school curriculum.
- Information packet that includes student handbook, map of the middle school, teachers' names and/or their photographs
- Special parent sessions with accompanying parent handbook
- Summer Institute or Orientation, providing parents and students with school information, assignment of teachers and opportunities to meet homeroom teachers, student schedules, an abbreviated school day, etc.

Middle to High School Practices:

- Pair eighth grade students with high school students from their middle school
- High school students come to middle school to share their view points about high school and to answer middle school students' questions. Sometimes these students are called "ambassadors"
- Big Brother, Big Sisters programs in which students volunteer to serve as peer counselors, coaches, and guides for incoming students.
- Small groups of middle school students visit the high school during their "rising" year.
- Starting the formal transition program in mid year with high school counselors visiting with small groups of students in the middle school to discuss the scheduling process and share information on different programs.
- Hosting eighth grade parent orientation in high school
- Summer Orientation during which new students visit the high school, review schedules, locate their classrooms and lockers.
- Providing gifts at special events such as pencils with the new school name, buttons, T-shirts for the student who recall the most facts about the high school from previous information sharing sessions

High School to Beyond: Goal Set to Improve Workplace Preparation. St. Mary's County Public Schools in Leonardtown, Maryland made a decision to better prepare students for the world of work. In 1987, the school district began to hear complaints from local employers about poorly qualified workers. These concerns motivated St. Mary's to design their high school courses and culture to teach skills relevant to future job markets. In the courses, staff developed and implemented strategies to help students make effective career connections. The number of electives was reduced, keeping only those that were focused, challenging, and relevant to students' career plans. By combining high

expectations with clear goals, the vocational program was reconfigured to emphasize job-related skills. The district leaders promoted staff support for this goal by presenting research findings to raise expectations and by providing training to help coursework revision to include hands-on experiences in technology..

Components of the Tech Prep Program: The Tech Prep program developed focuses students' attention on their future employment choices by engaging them in a variety of career-related experiences throughout their school years. Students are guided through an extended career orientation experience beginning in the elementary school, intensifying in middle school, and providing high school courses that concentrate on skills needed in the 21st century. In summary the components are:

1. Career awareness is emphasized in elementary school. In the sixth grade student aptitudes, interests, and abilities are assessed.
2. In the middle school, individual folders for each student are created with all the data related to career selection. Job shadowing and research projects are required to help students set their goals. All eighth graders take the Differential Aptitude Test in September. These results are used in individual career counseling to plan with the student course registration in the ninth grade.
3. At the high school, counselors reiterate career themes in their contacts with ninth graders. Students self-assess their skills with two instruments: the Job OA and the Harrington-O'Shea for Career Decision Making. Students are required to select one of four career cluster options: applied Business/management technologies, applied engineering/mechanical technologies, applied health/human services technologies, or four-year college preparation. Including college-bound students, all ninth graders are required to enroll in a course that introduces them to technologies in one of the three career clusters. For example in the engineering/mechanical cluster, the course is structured around short but intensive modules such as biotechnology, medical technology, bridges construction, residential wiring, solar power, etc. and engages students in hands-on experiences. Ninth and tenth grade students receive orientations to the Technical Center maintained by the county

   Curriculum integration has been focused on real work situations. In English classes, for example, applied communications have been integrated into literature study. Ninth graders learn how to follow the type of directions used in a job setting while eleventh graders study techniques of persuasion and advertising and look for examples in their daily life. To connect literature to the more applied components of the curriculum, readings are often integrated with other courses. For example, students read Lord of the Flies in English while they are studying the functions of governmental rules in Civics class

Possible Indicators:

1. Articulated student standards that include workplace preparation and had the input from all key stakeholders
2. Documented school plans including school improvement plans
3. Plans for developing, implementing, or improving current transition programs that include:
   - Planning and coordination with the sending and receiving schools
   - Early communication with students and parents
   - Summertime schedules
   - Onsite orientation activities
4. If an elementary school, then plans for or actual program that helps young children to transition to the kindergarten
   - Quality preschool experiences.
   - Quality elementary school programs
   - Parent involvement.
   - Continuum of family-focused and community-based services
   - Communication and collaboration between preschool and elementary school staff -teacher conferences

- Preparation of children for transition to kindergarten

Guiding Questions in Using Information from Indicators:

A. Who was involved in setting student standards? Were all key stakeholders involved in the process?
B. Is workplace preparation included among the school's student standards?
C. Do all the staff know the school's student standards and use appropriate instructional methods to teach skills related to the goals?
D. Does the school have adequate assessment tools to measure student learning relative to the goals or standards set for students?
E. Are school student standards prominently displayed in the building? Are they included in the student, teacher, and parent handbooks?
F. Do student standards guide textbook and resource selection and curriculum development work?
G. Does the school have plans or a program in place that addresses the needs of entering and exiting students? Is there planning and coordination between the sending and receiving schools occurring? How is information communicated to new students and parents? What onsite orientation activities are included? Are there any summertime scheduling of activities for new students and parents?
H. If an elementary school, does the school address the unique needs of its young children who will be coming to school for the first time? What activities does the school do that makes this transition easier for them? Does the school's primary grade staff have training in developmentally appropriate practices and activities? Does the elementary and preschool educational programs' staff communicate and collaborate in order to make the transition smoother? How has a network of health and social services been developed to meet the needs of young children and their families? In what ways are preschool children prepared for the transition to kindergarten?

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3. Criteria: Effective schools coordinate resource use to focus on established student standards and school improvement efforts.

What the Research Says: In effective schools, staff members who will support the school's mission and contribute to its effectiveness are recruited and hired. These schools and their respective districts make use of proven practices to recruit and retain excellent teachers, including teacher mentoring, rich inservice opportunities, and hiring members of cultural minorities, especially in culturally diverse settings. Also, teacher qualifications and preparation are examined and considered when new staff is hired. While the use of qualified (non-certified) staff may suffice when certified staff is not available, over the long term the use of a certified history teacher teaching mathematics can be detrimental to student learning and instructional improvements. The district and schools make use of proven practices to recruit and retain excellent teachers. They provide teacher mentoring, rich inservice opportunities and hiring members of cultural minorities, especially in culturally diverse settings. Districts review recruitment, selection, and promotion policies periodically to ensure that creative, innovative building administrators are hired and retained. To ensure that optimal physical environments are provided for teaching and learning, districts and schools review regulations and requirements governing construction, remodeling, and maintenance of school facilities. Effective schools make planning for such physical repair and maintenance part of their school planning.

Instructional resources are carefully coordinated to support student standards and school improvement efforts. Today, the function of instructional resources has rapidly shifted from simply presenting content to the provision of multidimensional support to students' and teachers' learning. If resources are meant to serve the learning process, it is necessary to understand the multiple tools, such as technology and the potential drawbacks and numerous benefits. The consequences of using the array of available learning resources depend largely on the context of their use. Examining student standards is the first step to putting resources at the service of learning. The next step in understanding, selecting, and using resources effectively requires a closer look at the attributes of effective learning environments that stimulate successful learning. An important step in successful resource use is to develop teachers' understanding of the attributes of stimulating learning environments.

Lastly selecting resources related to student standards is vital. Textbooks, programs, exercises, and kits have many times driven the curriculum, instruction, and assessment, rendering the task of teaching as a process of getting the material/content across. Curricular questions have frequently focused on which text series to adopt for each grade level and subject. However, efforts to achieve educational aims and to gain a deeper understanding of learning emphasize that resource selection should not be dominated by adoption committees or experts. Students, teachers, parents, and other educators need to be engaged in the resource selection process. Time and money are required to establish the collegial relationships and educational opportunities that engender ongoing collaborative planning of resource use in the design of effective learning environments. An increase in resource options is partly due to the recent abundance of new technologies, including personal computers with networking capabilities. Although books and other tools have always been available, resource issues have traditionally revolved around which books to select. Another reason for changing perspectives about instructional resources has been the primary goal of education to become broadly inclusive: literacy for all learners. The focus has been shifted from materials to students and makes the curriculum less dependent on simple resources like textbooks.

Considerations in Selecting Instructional Resources:

The goal of instructional resources is to improve student learning. To meet that goal, several considerations need to be reviewed before quality instructional resources can be selected and used.

- ***Defining Learning Resources.*** A learning resource is an object, event, service, or institution that students and teachers use to help reach their educational goals. The focus is on learning rather than things. This includes not only traditional tools such as textbooks and workbooks or multiple tools such as computers, video microscopes, VCRs

but also tools or experiences that add depth and breadth to students' comprehension such as talents of people in the community, ordinary phenomena outside the building, or reflection time to recount experiences. It is not just having advanced technology with Internet connectivity and access but how these are used to promote student learning and attainment of student standards.

- ***Learning Context Determines Value of Resources.*** Learning context determines the educational value of any item, person, or event. A resource tool elicits learning depending on who uses it and their purposes, thoughts, and feelings about an experience or when, where, and how the resource is used. Perhaps a critical part of the resource's value is the teacher's ability to translate materials or programs into opportunities for children to learn. Questions to ask to discover the factors that render a resource effective or not might be:
    1. What are the immediate and long range needs of the students?
    2. Will district policies or other social forces favor one resource over another? If so, is the favorite choice the right choice?
    3. Do funding constraints mean that purchasing one promising resource will preclude acquiring another of greater priority?
    4. How will teachers find the support and time to adapt the resources to their own classroom milieus?
- ***Goal of Resource Use: For All Learners.*** Emerging research is showing that content skills whether mathematics and science or languages are best learned in contexts that show how they are usually *embedded in more complex skills*. Also, concepts are best learned in contexts that emphasize their *interrelationships* and their *relationships to diverse school subjects and experiences outside of school*.
- ***Creating Equal Access to Resources.*** When schools establish student standards for all students, they are obligated to vary services generously and flexibly, take social distinctions into account and make it possible for every student to achieve. Educational equity points to the critical distinction between **equal** services, services that are provided to all students regardless of their differences and **equitable** services, services that provide the support that a student needs to reach the outcomes expected of all students. Resources need to facilitate the differences of students' multiple needs. For equitable resources, the guiding question might be How can each student use the resource or some other resource to do well? Equity requires that instructional activities begin by considering students" current life circumstances to guide them through learning adventures toward student standards.

Guidelines for the Process of Selecting Instructional Resources:

- ***Who Makes Resource Decisions.*** Resource selection is broad-based and can no longer be restricted to decisions made by a core group of teachers acting as a resource selection committee. It involves all participants engaged in learning and teaching. Teachers, administrators, parents, families, educational specialist and students are necessary if the curriculum is to be responsive to students' diverse concerns, instructional priorities, and financial realities.
- ***What Are Resource Decisions.*** When considering resources, the environment in which they will be used needs to be evaluated. While consideration to existing district and school policies on curriculum should be considered, it is not enough to identify resources that correspond to such policies if the policies do not reflect valued attributes of learning environments. Finally, individuals selecting resources need to be fully aware that curriculum does **not** reside in the materials or other resources that they choose.
- ***Guide to Planning and Understanding Resource Selection.***
    1. Know the participants - the names and positions of individuals; their basic beliefs about learning and resource use; how they were chosen; social groups that should be represented; individuals who should be consulted.
    2. Establish goals based on assessed resource needs - does the definition of resource include people, services, and teachers' workshops about using resources? Consider the assigned selection goal to recommend or provide specific resources for certain subjects, grades, and/or teachers; to designate obligatory or optional core or supplementary resources; and to specify resources or categories that must be explored or considered. Place explicit limits on resources decisions to ensure that resources complement specific textbooks, teaching approaches, or assessment practices; designate individuals to approve resources. To use money more efficiently, honor groups' preferences, and promote staff development.
    3. Set a schedule - identify official deadline; recognize that selection is an ongoing task that involves a cyclical recruitment of new members, procedural reviews, etc.

4. Prepare a budget - designate funds for the selection process and resources; categorize and project dates of anticipated expenditures; delineate to who and when resource selectors will communicate decisions.
5. Explore existing guidelines, committees, and communities - include the efforts and decisions of staff, curriculum committees, administration, etc.; outline existing or planned curriculum frameworks, mission statements or related documents; consider national standards; consider the interests of various groups regarding selection, including teachers' associations, ethnic or religious groups, labor or business interests, state legislature, etc.
6. Research educational needs - consider the educational reality of students who will use the resources, for example, information about student achievement, instructional approaches, equity, assessment, and reforms currently underway; note other factors about student lives that determine their resource needs; consider the current perspectives from professional literature and local experience about the role of resources for students; and delineate any broad issues that the resources are expected to address, for example, the broad goal to prepare youth for life's work as citizens, earners, family members and social problem solvers.
7. Recognize supportive and constraining factors.
8. Formulate selection criteria - documents or directives that are recommended or designate to serve as criteria for selecting resources; attributes of learning environments that the resources work to create or maintain; and the process for establishing selection criteria if none have been established.

- ***Professional Development: Key to Resource Selection.*** Opportunities to extend teachers' professional skills are key to the successful selection and use resources and their use. Quality resource selection requires professional development; teachers need to be empowered to make change.

Possible Indicators:

1. Qualifications of teachers and administrators such as:
   - number of certified teachers teaching in their area (50% or more of the time)
   - number of certified teachers teaching out of their field
   - number of uncertified teachers
2. Policies that support coordinated budget efforts and decisionmaking with student standards and school improvement goals
3. Identification of resource needs related to student standards and school improvement in terms of
   - equitable use of resources
   - resource use for all learners
   - staffing
   - instruction
   - possible community resources
   - physical space
4. School budget - school commitment to instructional resources
   - Flexibility in how funds are used for resources
   - Reallocation of budget funds to reflect school improvement efforts
5. School schedule - timeline for resource selection
6. Broad base representation in resource selection
7. Focus of resource selection and use in on student standards and school improvement goals
8. Opportunities for staff to collect information on resource options and for staff development in selecting and using resources
9. Procedures for teacher selection that target staff resource needs

Guiding Questions in Using Information from Indicators:

A. Are students being taught by certified teachers teaching in their field? What percentage of the teachers are doing this?
B. What policies are in place that coordinate budget efforts and decisionmaking with student standards and school improvement efforts? What organizational structure(s) have been given the charge or responsibility for doing this (resource selection)?
C. What process is in place for identifying the resource needs of the school in terms of student standards and school improvement efforts? How can each student use the resource(s) to reach the student standards expected of them? How are staffing needs determined and new staff selected? How will the learning environment use the resource so that student and teacher learning is promoted? What community resources could be used to support student and teacher learning? Is there broad base involvement?
D. Does the school budget reflect a commitment to instructional resources? Are funds reallocated to address school improvement needs? Is there flexibility in how funds can be used for instructional resources?
E. Does the school schedule allow enough time for the selection of appropriate resources? enough time for the input from broad-based groups? enough time for the gathering of information necessary to make resource decisions?
F. What opportunities are made available for educators to gather and examine information about new resources? How are new resources identified (e.g., contact with other schools, visitation to new programs, attendance at conferences, workshops, regional meetings, etc.)? Has there been professional development on the selection and use of resources?
G. Has enough time been provided in meetings for various groups to communicate and discuss the selection and use of resources?

Citations:

Ariav (1988); Assn. of State Supervisors of Mathematics, (1993), Bebermeyer and Edmond (1995) Behr and Bachelor (1981); Boone (1992); Boyce, et al. (1993); Corbett and Wilson (1992); David (1989); Everson, et al. (1986); Feldkamp-Price, Rillero, and Brownstein (1994); Fullan (1993); Hallinger and Hausman (1993); Hallinger, Bickman, and Davis (1989); Jones, Valdez, Nowakowski, and Rasumussen (n.d.); Levine (1990); Levine and Lezotte (1990); Libler (1992); Lomotey (1989); McAlpine and Weston (1994); Miller, Smey-Richman, and Woods-Houston (1987); Murphy and Hallinger (1986, 1988); Murphy, et al. (1987); Odell and Ferraro (1992); Pajak and Glickman (1987); Peterson, Murphy, and Hallinger (1987); Pine and Hilliard (1990); Purkey and Smith (1983); Schlechty (1985); Trevino (1992); Valadez and Gregoire (1989); Van Orden (1995); Wilson, B. L., and Corcoran (1988)

STRONG LEADERSHIP AND SCHOOL IMPROVEMENT

4. Criteria: Effective schools have strong informed leadership that utilizes well established research to guide the instructional program.

What the Research Says: School leadership, consisting of the principal, other administrators, and/or school instructional leadership team, believe that all students can learn and that school makes a difference between success and failure. They emphasize learning as the most important reason for being in school. For example public speeches and writings stress the importance and value of high achievement. The school's mission is stated in direct, concrete terms, and the school leadership establishes an instructional focus that unifies the staff. Strong school leadership undertakes school restructuring efforts as needed to attain student standards. It works with a broad base team to identify needed changes to support student attainment of standards. When undertaking restructuring efforts, the leadership reviews school operations, studies restructuring efforts conducted elsewhere, and considers contextual information such as availability of resources, nature of incentives, linkages within the school, school goals and priorities, current instructional practices, and stresses among staff.

Standards and guidelines are used by the leadership to set expectations for curriculum quality. Curriculum is reviewed for alignment with instruction and assessment; curricular priorities are established; and curriculum implementation is monitored. Relying on explicit performance data, the school leadership checks student progress frequently. Student performance results are made public and used to set student standards with staff as well as to make comparisons and to identify discrepancies. Innovative curricular programs are identified and observed by the school leadership before acquainting the staff and discussing possible adoption or adaptations.

School leadership not only expects all staff to meet high standards but also communicates to them that they are expected to improve their instructional programs over time. The school leadership knows the educational research, emphasizes its importance, shares it, and fosters its use in problem-solving. When appropriate, the leadership models effective teaching practices for staff, indicating that they know and can apply validated teaching and learning principles. Staff agreement is secured on a schoolwide instructional model. Classroom visits to observe instruction are conducted with supervision focused on instructional improvement. To support instructional expectations, staff development activities are provided to staff members. Instructional improvement efforts are well-organized and systematic. The leadership gives improvement activities a high priority and visibility. The full staff is involved in the planning of the implementation of instructional improvements while the leadership monitors implementation carefully, setting expectations for participation, ensuring follow through in commitments, and gaining support for improvements efforts from different constituencies in the school community.

Example of Strong School Leadership: Thurgood Marshall Elementary School, Seattle, WA

Marshall Elementary School was newly created in 1990 to serve about 300 students in grades K-6 in an inner-city neighborhood in Seattle. The school's population is approximately 78 percent minority with 20 percent of the students having limited-English proficiency and about 17 percent qualifying for special education services. Familiarizing himself with the research on schools that successfully serve inner-city school populations, the new principal instituted a hiring procedure aimed at securing the kind of staff indicated in the research - teachers with 5 years of experience and with interest in working with the kind of students at Marshall. In addition, the principal's research efforts made him aware of the Comer Restructuring Model developed by Dr. James P. Comer at Yale University. Because of its emphasis on parent involvement, especially parents of color and its aim of creating a caring community, this model was implemented at Marshall.

Collaborative decisionmaking involving staff, parents, and agency representatives was utilized to develop policies, procedures, and programs to improve academic performance and school climate. The School Planning and Management Team (SPMT) was set up as the school's governance structure. It is comprised of the principal, counselor, nurse, speech therapist, a paraprofessional representative, the chairpersons of the five subcommittees, and three parents. The SPMT lead the effort to develop mission and vision statements, a plan for both social and academic goals, an adult development plan, and a comprehensive assessment and evaluation plan for all program components. All staff

and many parents joined at least one of the subcommittees. Each subcommittee is responsible for implementing and monitoring part of the strategic plan. Core SPMT members conduct teacher interviews three times a year to identify strengths, accomplishments, and needs of each Marshall student. The elementary school uses a Mental Health Team to focus on prevention of and interventions into mental health issues. The Parents Leadership Team addresses the needs of parents, encourages parent involvement, and provides adult education. The principal and staff conduct vigorous outreach activities to secure parent participation and support. An half-day parent workshop is given to familiarize parents with the ways that they can support their children's school performance. Ongoing staff development supports the district and school goals as it promotes principles of child development.

Within this highly collaborative and caring atmosphere, the principal at Marshall Elementary School has provided his school with the leadership necessary to realize the school's mission by implementing the following effective practices:

Collaborative mission statement. The mission statement at Marshall is

> "We, the Marshall staff, in partnership with families and the community, teach, nurture, and learn from children and each other. We believe that all children can learn. Working together, we can make a difference in the lives we touch."

Expressions of this belief can be observed everywhere. The *Marshall Curriculum Guide* specifies activities and resources designed to achieve student standards, including student empowerment, student responsibility for their learning, student self-worth, the ability to work cooperatively, understanding and skill in language arts and mathematics, word processing and desktop publishing skills, problem solving, and other higher-order thinking skills.

Basic needs. The principal and counselors meet weekly to discuss student needs and to determine appropriate educational, health, and/or social services. Family support and community service workers provide services and make referrals to outside agencies.

Positive school climate. Recognizing the power of school social climate on academic performance, Caring Teams have been established to establish trust and mutual support over time. Caring Teams are long-term, family-like groups of eight or more members. Every child and Marshall adult are involved in a team. In addition, counseling services, peer mediation, positive discipline, and violence prevention activities contribute to a safe and supportive school climate.

Community partnerships and collaboration. Business partners as well as partnerships with other educational agencies are involved in the education of Marshall students. For example, the school has an Intergenerational Project whose membership consists of people 50 years of age or older interacting with students. The school also has collaborative partnerships with Antioch University -Seattle, Seattle Mental Health Institute, Atlantic Street Center, Union Gospel Mission Youth Activity Center and Easy Madison YMCA.

Equity. Marshall Elementary School is involved in the state MESA (Mathematics, Engineering, Science Achievement) program, established to address the needs of groups who are underrepresented in these fields. The statewide program is a partnership of organizations to provide services to underrepresented students to increase their interest, participation, and contribution to math, science, and engineering.

The Bilingual Orientation Center serves students who are new to this country during their first year of school. Many of the students participating at the Center are from relocation centers who have never attended school because of conflicts in their home countries. Students come from Ethiopia, Laos, Bosnia, and South American countries. The schools integrates ESL students into all school activities to build language and socialization skills and to avoid an "us and them" mentality.

Monitoring student progress. Each year the school profile of academic achievement, The Marshall Composite, is compiled and displays students' achievement in reading, math, and language arts. Standardized and locally developed assessments are used to track academic growth with planning time set aside for the staff to analyze the data, identify appropriate instructional changes, and to plan the implementation of changes. Through teacher interviews, all students are screened and their academic, behavioral, social, health, and social service needs identified. School level plans and arrangements for referrals are made based on identified needs.

Coordination with other programs. Marshall is an Early Childhood Model site that requires matching the instruction to each child's learning style and rate. In addition, gifted, special education, and Title 1 services are provided to qualifying students. The school is also a magnet school in the area of science and computers as well as providing instruction in music, physical education, environmental education, and having after-school tutoring.

National recognition. Marshall Elementary School is one of 60 schools cited for "overall excellence" in the April 1995 *Redbook* magazine feature "America" Best Elementary Schools." Also, it is one of six schools selected as Demonstration Schools by the National Alliance of Black School Educators in 1995.

Possible Indicators:

1. Leadership undertakes restructuring efforts
    - Uses school data and inclusive decisionmaking to identify improvement needs
    - Studies restructuring efforts conducted elsewhere
2. Ways school leadership guides the instructional program and shows its commitment to improvement of instructional programs such as
    - Leadership facilitates staff discussions about research based practices and possible adaptations
    - Leadership showcases effective practices that are noted during classroom observations or models effective practices in the classroom
    - Leadership encourages staff to observe each others classrooms by offering to take over teachers' classrooms
3. Written and collaborative school mission
4. Involvement of staff and community in developing instructional improvement plans
5. Documented instructional improvement plans based on explicit student performance and student standards
6. Visible demonstrations within the school that student learning is highly valued and important
7. Curriculum documentation
8. Staff supervision protocols
9. Provision of staff development and its relationship to instructional improvement plans

Guiding Questions in Using Information from Indicators:

A. Who provides instructional leadership within the school?
B. Can the leadership (team) concretely articulate the school mission? Do all the school staff know what the school mission is?
C. How are areas for instructional improvement identified? To what extent are the staff involved in planning improvement strategies and their implementation? What priority is given to instructional improvements? Do all teachers know what the schools' priorities are?
D. In what ways are effective schooling research communicated to the staff?
E. Does the leadership or team model effective teaching practices when needed?

F. How often is the curriculum and its alignment with instruction and assessment reviewed? How are curricular priorities established? What kinds of information are priorities based on?

G. How often does the school leadership observe classroom instruction? Is the focus of staff supervision on instructional improvement? To what extent is instructional credible and useable by staff?

Citations:

Andrews and Soder (1987); Bamburg and Andrews (1991); Berman and McLaughlin (1979); Biester, et al. (1984); Bossert (1988b); Brookover (1979, 1981); Brookover and Lezotte (1979); Brundage (1979); Cawelti (1987); Cohen, S. A. (1994); Cohen, S. A., et al. (1989); Corbett, et al. (1984); Crisci, et al. (1988); DeBevoise (1984); Druian and Butler (1987); Eberts and Stone (1988); Edmonds (1979a); Emrick (1977); Everson, et al. (1986); Fortune, Williams, and White (1992); Fullan (1993); Fullan (1994); Glasman (1984); Good and Brophy (1986); Hallinger, Bickman, and Davis (1989); Hawley, et al. (1984); Heck (1992); High and Achilles (1986); Krug (1992); Larsen (1987); Lee and Smith (1993); Leithwood (1994);Leithwood and Montgomery (1982, 1985); Levine and Lezotte (1990); Lewis (1989); Little (1982); Louis and Miles (1989); Madden, Lawson, and Sweet (1976); McCarthy and Still (1993); Murphy and Hallinger (1993); Ogawa and Hart (1985); Pavan and Reid (1991, 1994); Prestine (1993); Prestine and Bowen (1993)Purkey and Smith (1983); Rosenholtz (1989a,b); Sammons, Hillman, and Mortimore (1994); Schmitt, (1990); Venezky and Winfield (1979); Weber (1971)

5. Criteria: Effective schools strive to improve instructional effectiveness as part of an ongoing process.

What the Research Says: Effective schools expect that educational programs will be improved over time and are never complacent about their student achievement. School improvement efforts (i.e., curriculum, instruction, assessment, and operations) are directed at clearly defined student standards and/or social behavior goals. Effective schools collect and use schoolwide data and information to build a school profile that displays information in useful formats for target audiences. Working with school staff and broad-based groups or teams, the school leader or leadership team develop and establish school improvement goals based on a review of school performance data or school profile. They also secure schoolwide and community understanding and agreement about the purpose of improvement efforts. The improvement goals then become the focus for planning and implementation. In planning and designing improvement strategies, programs or restructuring efforts, schools review the educational research and programs and practices shown to be effective in other school settings for their potential in helping to meet the school needs. Resources are secured to support improvement activities including community sources with resource allocation based on instructional priorities. The leadership clearly specifies the roles and responsibilities for the different aspects of the school improvement efforts. Implementation plans are developed and implementation is frequently and closely monitored for troubleshooting purposes so efforts can be modified as necessary. During implementation of improvement plans, ongoing staff support is provided, and progress is publicized. Adequate time is allowed for innovations to become integrated into the life of the school. As improvement goals are achieved, improvement efforts are redirected or new goals established with the staff and other broad-based groups. Effective schools report and celebrate their successes, providing periodic events for such acknowledgments and to renew interest and energy for continued school improvement efforts.

Effective Practice: Building a School Profile

To build a school profile, effective schools collect different kinds of information to describe their school performance, enabling them to get a clear picture of how well they are performing. The task includes gathering, organizing, analyzing, and displaying data. For schools developing a profile for the first time, they need to be aware that it is possible to spend all of its time identifying the information it wants in its profile, collecting the readily-available information, developing strategies to collect hard to access information, compiling the data, and still not have all the information that is necessary or desired. In such situations, it is suggested that a school build a preliminary profile, adding information as the school gains confidence and experience. Developing a profile is a dynamic process that requires planning and processing at both the building and district levels. Information might come from the central office or involve staff in collecting data at the school. Decisions regarding school improvement efforts are based on this profile. The profile becomes the baseline from which the school measures student success and school improvement and for redirecting future improvement efforts.

Outline for Building a School Profile *

Data gathering considerations

- District level data - determine the information available at district level that can be disaggregated for school use; format that data is in and needed assistance to collect and use district data
- Building level data - identify the types of data that is kept at the school; format that data is in; who has responsibility for the data; and data that needs to be collected for profile;
- Plan for collecting data - develop a clear outline stating: the types of data needed, availability of data in useable format; time intervals that data is currently collected (e.g., quarterly, yearly, every two-five years, etc.); data sources such as survey, school records, etc.; time when data becomes available; needed data that is not currently collected or easily accessible; development/identification of instrument for collecting currently inaccessible data; and staff responsibilities in data collection
- Data collection assumptions - data is collected and reported on all students; data is desegregated by meaningful variables such as race/ethnic group, gender, SES or reduced-price and free lunch. When possible, multiple sources of information on a variable should be collected to verify conclusions. For example, a conclusion that students are performing poorly in math might be based on information from standardized test scores, state open-ended math performance assessments and class grades in mathematics.
- Data disaggregation - disaggregation is a critical part of the school profile and the school improvement process. Data is broken down into its parts or it is grouped according to some variable such as gender (boys compared to girls), low SES-high SES (children on reduced/free lunch compared to those not on free/reduced lunch), or ethnic group. For example, average student performance in mathematics might be broken down by gender, comparing the average performance of girls to that of boys. The same overall math information might be broken down by ethnic group, grade levels, or SES. When data is broken down by a variable, all the categories within that variable are compared. It is possible to break information down into multiple levels. For example, a school could look at the average mathematics score for girls and boys within the low SES group compared to girls and boys in the high SES group. However, when data is disaggregated to a point where one or more categories within a group contain less than 20 students, interpretation of results can be misleading and unreliable.
  On the other hand, aggregation of data means that all of the components or groups are put together into one statistic such as the average mathematics score for the school.

***Data organization**: Contents of a school profile*

- Contextual information that describes the setting in which the school operates such as the population of the community and its ethnic breakdown, number of students enrolled in the school, grade levels, student mobility rates, percent of students receiving reduced or free lunch, or special services, etc.
- Student performance data that provides clear indications of the success level of all students in the school. Different categories of student performance data include:
  1. multiple assessment measures such as norm-referenced, criterion-referenced, state assessments, performance-based assessments, etc.;
  2. achievement patterns such as enrollment patterns, retention and drop-out rates, GPA, post-secondary follow-ups
  3. access patterns that include attendance, tardies, graduation rates, extra-curricular involvement, family and community involvement
  4. lifelong learning such as career goals, post-secondary follow-up, health practices (e.g., drug and alcohol use, etc.) self concept/esteem
  5. school climate such as student attitudes, conduct violations, etc.
- Staff and community involvement includes staff measures such as demographics, mission statement, staff preparation, staff development; and community measures such as an analysis of community and types of parent, family, and community involvement

Data Analysis

Data analysis needs to be planned and purposeful. The results from data analysis identify areas that the school is doing well and areas in need of improvement. The information gleaned from the profile becomes the school's baseline to which subsequent school performance is compared or to which local, state, and national standards are compared. Building a school profile becomes part of an ongoing process of data gathering, organizational, and analysis. The profile provides the direction for school planning and improvement efforts. Part of developing a school improvement plan includes prioritizing the area(s) in need of improvement, identified in the school profile. All decisions regarding the management and development of the school improvement plan is data driven.

* Adapted from *Building a School Profile: The Quality Performance Accreditation Needs Assessment Process*. Prepared by the Outcomes Education Team of the Kansas State Board of Education. November 1993.

Possible Indicators:

1. School Profile that includes
    - contextual information
    - student performance information appropriately disaggregated
    - community and staff involvement
2. Documentation of a School Improvement Plan
3. Demonstrations of broad-based involvement in developing the plan such as a list of participants and respective positions who worked on developing improvement goals, documentation of the process of inclusive decisionmaking
4. Documentation of an Implementation Plan with accompanying timeline
5. Documentation of school's progress in meeting improvement goals such as data supporting progress

Guiding Questions in Using Information from Indicators:

A. Is there an updated school profile? Does the profile adequately describe the school and the performance of its students? Is the data analyzed and displayed appropriately? Has the information been disaggregated so that meaningful interpretations can be made regarding needed improvements? Does the school collect information as part of an ongoing process?

B. Is there a school improvement plan in place? Are school improvement goals based on the information depicted in the school profile? Are school improvement goals directed at clearly defined student standards and/or behavior goals?

C. What was the process that the school used to establish school improvement goals? Who was involved in the process? Is there staff and community buy-in ? How does the school determine this?

D. If a school has an improvement plan, at what stage of implementation is the school?
    - not started yet
    - initial -there is discussion but no implementation yet
    - teachers are trained
    - teachers and others have started implementing the improvement in some of the targeted classes
    - all targeted classes/children are receiving the planned services
    - the improvement has become an integral part of school life

E. What are the school's next steps in terms of their improvement efforts?

Citations:

Bamburg and Andrews (1989, 1991); Berman and McLaughlin (1979); Biester, et al. (1984); Bossert et al. (1982); Boyd (1992); Brundage (1979); David (1989); Deal and Peterson (1993); Edmonds (1979a, b); Emrick (1977); Everson, et al. (1986); Evertson (1986); Fullan (1992); Gall, et al. (1985); Hallinger and Hausman (1993); Hawley, et al (1984); Hord (1992); Hord and Huling-Austin (1986); Leithwood and Montgomery (1982); Levine (1990); Levine and Lezotte (1990); Little (1982); Louis and King (1993); Madden, Lawson, and Sweet (1976); Murphy and Hallinger (1993); Oakes (1989); Pavan and Reid (1994); Purkey and Smith (1983); Rosenholtz (1985, 1989a,b); Sparks (1983 1986); Stringfield and Teddlie (1988); Venezky and Winfield (1979); Weber (1971)

6. Criteria: Effective schools involve staff, administrators, parents, families, and businesses in ongoing staff development that is focused on student standards and school improvement goals.

What the Research Says: Effective schools make available resources to support ongoing staff development programs that are designed for school improvement, focusing on student standards. Because staff must feel that staff development activities are relevant in order to benefit, administrators and/or leadership team seek and use staff input for the content of professional development activities. Time is set aside for staff development activities with at least part of that time occurring during the regular work day. For successful implementation of professional development to take place, two conditions within the school context needs to exist: 1) there is an environment that encourages frequent talk and experimentation in the practice of teaching and 2) teachers and administrators frequently observe each other for feedback, reflection, and support regarding the teaching process. While research supports the value of collegiality for effective staff development, its use as a mandated approach or contrived entity in situations where there are no structures to support it can undermine staff development efforts. Effective staff development requires formal collaborations among teachers and these collaborations are supported by pre-existing informal collegiality. In addition, prior to staff collaborations, the research suggests that there should be some predisposition existing among staff for improvement; an understanding and support on the part of the school leadership for the concepts of collaboration and collegiality; the school is the unit of change, teachers and administrators are seen as an important resource; and support for enhancing teacher effectiveness is based on knowledge of what teachers do. School leadership works to establish a norm of collegiality by communicating the expectation that staff members will routinely share ideas and work together to improve the instructional program.

The design of an effective staff development programs recognizes that adults, like children, have different learning styles and provides diverse kinds of learning activities in response to these differences. The design is based on the principles of adult learners and a full understanding of the process of change. Activities are provided that enhance teachers' capabilities in the major areas of technical repertoire, reflective practices, application of research, and collaborative skills. To facilitate learning, staff development programs are delivered in more than one incident over an extended period of time. This approach offers participants opportunities to practice new learnings/skills and report their outcomes. Built into the staff development are opportunities for participants to share ideas and concerns regarding the use of new programs and practices. Structures are created for staff members to learn from one another through peer observation, coaching, or feedback. As school staff pursue school improvement goals, ongoing technical assistance is arranged. Follow-up activities are provided to ensure that newly acquired knowledge and skills are applied in the classroom. Finally staff development activities are conducted at the building or district level to encourage group staff involvement. In summary, the delivery of staff development includes presentation of new material, demonstration, practice, feedback, and follow-up for evaluation and accountability.

School Characteristics that Promote Effective Staff Development:

- Staff members have a common, coherent set of goals and objectives that they have helped formulate, reflecting high expectations of themselves and their students.
- Administrators show strong leadership by promoting a norm of collegiality, minimizing status differences between their staff members and themselves. They promote informal communications, and reduce their own needs to use formal controls to achieve coordination.
- Teachers and administrators place high priority on staff development and continuous improvement of personal skills, promoting formal staff development programs, informal sharing of job knowledge, and a norm of continuous improvement.
- Teachers and administrators use a variety of formal and informal processes for monitoring progress towards goals, using them to identify obstacles to progress and ways to overcome them rather than to make judgments regarding the competence of particular staff members.
- Knowledge, expertise, and resources, including time, are drawn on appropriately to initiate and support staff development goals.

Key Characteristics of Effective Staff Development:

Effective Staff Development Content

- Programs are planned in response to assessed needs of participants and content matches the current developmental level of participants - the content builds on participants' prior experience.
- The focus is school improvement rather than personal professional development.
- Content is concrete and aimed at developing specific skills rather than just introducing new concepts. The theoretical basis or rationale is part of the content of new skills.
- The focus is on job- or program-related tasks faced by teachers.
- There are clear specific goals and operational objectives defining what the participants will learn and how they will be able to use the new learning.
- Content is research based and is tied to student performance.
- The use of new behaviors is made very clear, and applicability to participants' home situation is understood.
- Between-workshop content, such as observation, visitation, and discussion is included to facilitate implementation.

Key Process Elements

- Participants are clearly expected to be actively involved in learning and to take responsibility for their own learning; self directed learning is emphasized.
- The staff development program takes into account that participants will have different concerns at different stages in the process of change.
- Content is provided in a variety of modes and through a variety of activities, including opportunities for both individual and whole group instruction and small group instruction.
- Complex knowledge and/or skills are introduced gradually, with the understanding that the more complex the content, the more time is needed to learn and practice.
- There is reinforcement of learning, both in the program and as part of the follow-up.
- Opportunities for collegiality learning are integrated in the program - participants work with and learn from each other.
- Readiness activities or self-diagnosis are included at the beginning of the program to determine participants' current skill levels.
- New material is presented and then modeled in the course of the program.
- There are opportunities for practice and experimentation in nonthreatening situations, so participants can receive nonthreatening feedback on something they have produced.

Example of Staff Development: Improving Student Writing Performance at East Orient Elementary School, Gresham, Oregon

East Orient Elementary School as a staff of 21 certified teachers for 386 students in grades 4-8. Classes take place in the same building. There is a small growing population of ethnic minority students, many of whom have no experience in school and arrive unable to speak English. The school has been focused on improving student performance since it became involved in the OTE school improvement process in 1984. From 1986-89, the school concentrated its efforts on improving student reading scores. After meeting its reading improvement goal, the school turned to writing, adopting the goal to improve student writing performance as measured by analytical writing assessments administered by the state. Also, the school received a grant from Oregon DOE's "School Improvement and Professional Development" program. With experience in moving toward improvement goals and funding for staff development, the school staff decided to focus on four goals:

1. Improving student writing performance - "By spring of 1989, 75 percent of the students at each grade level tested will achieve a mean performance equal to or greater than 3.6 on a scale of 1 to 5 in all six areas as measured by the analytical writing assessments."
2. Completing staff development programs to implement an integrated approach to writing. "By spring of 1989, 100 percent of the language arts staff will demonstrate an integrated approach to writing instruction. A variety of new strategies will be applied to classroom instruction across content areas."

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3. Improving student attitudes about writing. "By spring of 1989, 90 percent of the students will demonstrate an appreciation of writing as measured through an attitude survey. Throughout the year, students will participate in fun writing activities. Teachers will succeed in motivating students to write their best."
4. Increasing teacher collegiality through peer coaching and planning. "By spring of 1989, 100 percent of the staff will participate in team planning sessions, 50 percent of staff will make informal presentations at faculty meetings, and 30 percent of staff will present to teachers of surrounding districts."

A variety of staff development activities were developed to meet these goals during the 1988-89 school year including:

- A three-day June inservice for language arts teachers with a language arts consultant who presented a model for whole language instruction, integrating speaking, listening, reading, and writing in both expressive and receptive strands. Teachers learned instructional methods and techniques for this integrative approach and received extensive materials for classroom use. This consultant returned several ties during the school year to observe, provide technical assistance and give sample lessons to increase use of this approach.
- A follow-up half-day session at an October staff retreat with another language arts consultant offering further techniques for whole language instruction, with particular emphasis on writing instruction.
- Mini-grants to individual teachers to attend one- and two-day seminars, conferences and workshops with writing-related content during the year.
- Collection of resources on writing instruction, providing teachers increased access to professional literature in the area.
- Four full days of team planning during the school year to increase teacher awareness of and skills in a "writing across the curriculum" approach. One group of teachers met one day in July to follow up with discussions and planning for applying the language arts consultant's approach in their classrooms.
- A spring retreat focusing on writing response groups and cooperative learning techniques for teaching writing.
  Refocusing the peer coaching program to emphasize writing instruction, particularly teacher behaviors that enhance the students' "writing disposition" (favorable attitude about writing).

In addition to new activities, ongoing teacher development activities were continued, again with a stronger focus on student writing performance. Two ongoing teacher groups continued their work: the "Student-Focus Group" in which teachers met monthly to analyze and solve instructional problems of targeted individual students, and the "Pedagogical Problem Solvers," where teachers examined alternative instructional techniques. Tuition reimbursement, mini-grants, and leave programs were also continued. The staff development programs resulted in major changes in writing activities at the school including:

- The integrated approach to writing instruction led to emphasis on the publication of student writing and the creation of a Publishing Center for use in individual classrooms. The Center is a cabinet containing binding machines, writing materials and various paper colors and types, a mobile cart that moves from room to room as student projects are ready for final preparation. Language Arts teachers were trained in "Bookmaking" at a special inservice and work with students to design and complete publications. A parent volunteer now staffs the Center, increasing availability and shortening timelines from first draft to final product.
- Another publishing activity for students involved founding a quarterly literary magazine written, edited and produced by students, from copy and artwork through word processing of final copy to be sent to the printer. The magazine averages about 70 pages of student writings.
- Students now are producing a monthly newspaper featuring student writing and artwork and fully prepared by students.
- According to staff surveys, student attitudes about writing have changed, and staff are far more likely to become involved in innovative instructional approaches. There has been a drop in staff absenteeism accompanied by an increase in professional leave being granted for learning at meetings or through staff exchanges.

The combination of the school's current emphasis on improvement with significant staff development funding allowed East Orient to make an intense effort in one instructional area. A number of changes resulted, and the school was able to meet its goals.

- The student performance goal was met: by spring of 1989 the average school score on the analytical writing assessment had increased from 3.4 to 3.53 on a 1-5 scale.

- School language arts staff have now enthusiastically adopted a whole language approach to writing instruction.
- Student attitudes about writing appear to have changed dramatically, especially evident in interest in the publication of student work.
- More teachers spend more time working together to solve instructional problems and learn new instructional methods and techniques.

Possible Indicators:

1. Shared school vision of learning
2. Strong and active schoolwide professional community that has:
    - established norms of collegiality and discourse,
    - support for staff learning - teachers support each other in adapting instruction to meet students' learning needs; they develop teaching strategies together.
    - opportunities for staff innovativeness - teachers seek changes and value changes as a way to serve children better.
    - professional commitment to students, subject, school, and profession

3. Teachers' attitudes, perceptions, and adaptation patterns to meet the challenges of today's students
4. Structures that support work toward school improvement such as: organizational arrangements, roles and formal policies, time for joint planning, joint teaching arrangements, staff development policies.
5. Documentation of ongoing staff development and its connection to school improvement goals and student standards.
6. Descriptions of staff development programs including input from teachers, content, structure, and delivery of staff development

Guiding Questions in Using Information from Indicators:

A. To what extent does the school staff have a shared vision and purpose?

B. Does the school exhibit a norm of collegiality? Is there an expectation for shared work in a cooperative atmosphere for all teachers?

C. Is there a schoolwide norm for continuous improvement with high expectation for analysis, evaluation, and experimentation? To what extent do teachers work together with an understanding that the school will continue to improve?
How do teachers adapt to the challenges of today's children? Is the school community devoted to the success of all students and supportive of one another's efforts to adapt instruction to meet students' learning needs? or Do the majority of teachers enforce traditional standards? To what extent have teachers lowered their expectations of students to create a supportive classroom environment? Do they believe that students just can't make it?

D. What structures are in place that support school improvement?

E. What kinds of staff development are ongoing at the school? Did teachers have input into the content and structure? How was the staff development delivered? What was the staff's evaluations of the staff development?

Citations:

Bamburg and Andrews (1991); Bennett (1987); Block (1983); Boyd (1992); Butler (1989, 1992); Corcoran (1985); David (1989); Deal and Peterson (1993); Eubanks and Levine (1983); Everson, et al. (1986); Evertson (1986); Fullan (1992); Gagé (1984); Gall, et al. (1984); Gall and Renchler (1985); Hawley, et al. (1984); Hord and Huling-Austin (1986); Joyce and Showers (1980); Joyce, Murphy, Showers, and Murphy (1989); Kortneck, Schmid, and McAdams (1985); Levine, Levine, and Eubanks (1985); Levine and Lezotte (1990); Little (1982, 1986); Loucks-Horsley, et al. (1987); Louis and King (1993); March, et al. (1993); McLaughlin and Talbert (1993); Oakes (1989); Rosenholtz (1985, 1989a,b); Sammons, Hillman, and Mortimore (1994); Senge (1990); Sparks (1983, 1986); Sparks and Loucks-Horsley (1990); Stevenson (1987); Wade (1985).

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7. Criteria: Effective schools assure that school time is used for learning.

What the Research Says: Students learn at different rates in different content areas by different approaches. Yet, public education has held time constant and let learning be confined by its boundaries. Time has controlled the length of the instruction period regardless of the complexity of the content area. Students have been awarded high school diplomas based on "seat time" instead of high student standards. Within the current time structures of schools and classrooms, a great deal of potential learning time is lost. For example, students absences and tardies, school assemblies and programs that last too long or are held too frequently, and prolonged recess and breaks account for some of the loss of learning time. In the classroom, learning time is lost due to slow start -ups, lengthy transitions between classroom activities, disruptions caused by disruptive behavior or school matters, dead time, and off-task behavior. Research reveals a close relationship between the amount of time students spend engaged in appropriate learning activities and their levels of academic achievement. Even when students are "on-task", research has found that extended periods of seatwork and other noninteractive learning activities are less effective than interaction with teachers, aides, or other students.

Effective schools schedule events so as to avoid disruptions of learning time. Everyone in the school understands time-use priorities; school communications highlight the need to center time on learning. Time-use allocations are established for the various subjects taught, to focus on school and district goals, and time-use guidelines are followed by the staff. The school calendar is organized to produce maximum learning time. Inservice activities are provided to help staff make appropriate time allocations and increase student time on task. Improvement of classroom management skills is a focus of inservice activities. Prior to adoption, new instructional programs or school procedures are evaluated according to their potential impact on learning time.

During the school day, unassigned time and time spent on non-instructional activities are minimal. Loudspeaker announcements and other administrative intrusions are kept to a minimum and scheduled so as not to interfere with instruction. Student pull-outs from regular classes are minimized, either for academic or nonacademic purposes. The amount of pull-out activity is monitored and corrective action taken as necessary to keep things in balance. Extra learning time is provided for students who need or want it by scheduling time for extra help outside of regular school hours. Firm and enforced policies regarding tardies, absenteeism, and appropriate classroom behavior help to maximize instructional time.

Research has discovered that even when student experience greater quantities of allocated time in a particular content area, their achievement is only slightly better than those experiencing lesser quantities. Only a slightly stronger relationship exist between time-on-task (i.e., portions of time students are paying attention to a learning task and attempting to learn) and student achievement. However, there is a strong relationship between academic learning time (ALT - the portion of engaged time that students spend working on tasks at an appropriate level of difficulty and experiencing high levels of success, excluding time spent engaged in too easy or too hard of tasks) and both student achievement and attitudes. This strong relationship indicates that not all forms of time on-task are equal in their effects. Time on-task in interactive activities with a teacher produces greater achievement and better attitudes than time on-task in seatwork. Researchers have also identified time wastes that are negatively related to achievement. These include off-task behavior, dead time, social interactions, disruptions, behavioral problems, and some forms of seatwork such as in-class silent reading.

Research perspective on increasing time allocations. Inconsistent findings have resulted from research on increasing the overall quantity of schooling by lengthening the school day, the school year or both. It seems that "blanket" increases in time have uncertain outcomes and does not guarantee additional time will be used to better purposes. However, beneficial results have been reported for students needing additional help when the time is devoted to the use of effective instructional strategies. In fact, additional time is effective only if the reteaching involves different materials, examples, and demonstrations than those used in the initial instruction. "Rehashing" of the initial instruction does not increase achievement.

Using substantive findings from research, the National Education Commission on Time and Learning has made the following recommendations:

- Use time in new and better ways - learning goals are fixed and time is a flexible resource, relying less on the 50 minute period. For example, schools should use block scheduling to extend learning periods. Flexible time schedule encourages team teaching and grouping students by achievement if it is used to meet the needs of learners, not school staff.
- Establish an academic day - provide at lease 5.5 hours of core academic instructional time daily, sacrificing other activities and programs unless the school day is lengthened. During the longer day, programs to meet special needs of students such as compensatory programs, gifted and talented programs, and language instruction for LEP students and extracurricular activities can be provided
- Keep schools open longer to meet the needs of children and communities - greater use of school facilities. Schools open year round can provide services needed by adults, becoming centers for community agencies. Extended-day services offer children needed after-school child care. Schools are not necessarily the direct provider or funder of these services, but act as advocates for meeting the needs of children, parents, families, and the community
- Give teachers the time they need for planning, preparation, and professional development. Through extended contracts, longer school days, or use of a qualified cadre of substitute teachers, schools can give teachers time for these activities.
- Invest in technology. (Less research was available to support this recommendation). Through self-guided instruction, technology can improve the effectiveness of existing time by making more time available for student learning. Emerging hardware and software can personalize learning. It enables students worldwide access to information, not available locally and promotes communications with others (e.g., students, scientists, experts in content areas) through use of the Internet, CD-ROMS and distance learning. It can free up the time of teachers and administrators from tedious but necessary recordkeeping.

In addition, the Commission made these recommendations as a call for action:

- Reinvent schools around learning, not time. Student learning is the priority. Adding extra time is pointless if it is used in the same way.
- Develop local action plans to transform schools. To transform schools, schools engage in a community-wide discussion about the future of its schools, organized around learning time.
- Share the responsibility: finger pointing and evasion must end. Student learning is the responsibility of everyone from the federal government to the family and student. The government should focus on results, not redtape; higher education needs to get involved; business leaders support educational change; and parents, students, and teachers lead the way.

Effective Practices to Use Time Better:

Effective Classroom Practices to Make Better Use of Existing Time	*New Approaches to Use Time*
• Teachers allocate time to different content areas based on district and school goals. • Teachers keep non-instructional time to a minimum by beginning and ending lessons on time, keeping transitions times short and managing classrooms so as to minimize disruptive behavior. • Teachers set and maintain a brisk pace for instruction that remains consistent with thorough learning. New objectives are introduced as quickly as possible, clear start and stop cues help pace lessons according to specific time targets	*Block scheduling*. Schools use block scheduling (the use of two or more periods), extending time for exploration of complex topics, science projects, hands-on activities, thus promoting learning activities requiring higher order thinking skills *Nongraded organizational structures* in which, for example, • each student works in varied situations where they will have opportunities for maximum progress. There are no

Effective Classroom Practices to Make Better Use of Existing Time (continued)	*Approaches to Use Time in New Ways (continued)*

• To assure that time is used productively, learning activities are presented at a level that is neither too easy nor too difficult for the majority of students; adaptations are made to serve the needs of faster and slower learners.
• Teachers engage students in interactive activities that include:
  • the use of immediate feedback and corrective in classroom oral discussions
  • focused questions, praise, and reinforcement
  • listening and thinking during classroom interactions
  • discussion/review, reading aloud, verbal drill and practice
• Seatwork activities is beneficial when teachers:
  • keep it productive through careful preparation.
  • actively supervised the seatwork
  • provide assistance and feedback to students in such a way that others are not disturbed.
• Students are encouraged to pace themselves. If they don't finish during class, they work on the lessons before or after school, during lunch or at other times so they keep up with what's going on in class.
• Teachers regularly assign homework to students above the primary grades to extend learning time; assignments are corrected in class or graded and returned quickly.
	• procedures for retention or promotion, nor any grade levels
	• a student's placement can be changed at any time if it is felt to be in the best interest of the student's development stages: aesthetic, physical, intellectual, emotional, and social.
	• grouping and subgrouping patterns are extremely flexible. Learners are grouped and regrouped on the basis of one learning task and disbanded when the objective is reached
	• each student has opportunities to work with groups of many sizes, depending on the activity
	• the specific task, materials required, and student needs determine the number of students that may be profitably engaged in any given educational experience.
	• students should have contact with other students and teachers of varying personalities, backgrounds, abilities, interests, and ages
	
	Year-round school. Most year-round schools are a reorganization of the 180-day school year, not providing additional time for learning or nonacademic services. For example Foshay Middle School in Los Angles, CA creates four separate schools within its school Beginning and ending at a different time of the year , each of the four schedules enrolls one fourth of its students. At any one time, only three fourths of the students are present in the school building. During the two-week intercession, students are provided with 60 hours of instruction if needed.
	
	Extended school day and year. Murfreesboro City Schools in Tennessee have the most comprehensive extended day and year program in the country, operating elementary schools from 6 AM to 7 PM. This district distinguishes between the "school day", "educational services", and "extended school services " Parents taking advantage of educational services or extended school services pay a small fee while children in need of educational services receive them free (paid by the district) Educational services are offered from 8 AM to 5:30 PM and extended services before school from 6 AM and after school until 7 PM.

Possible Indicators:

1. Policies regarding the use of time
2. Organization of the school calendar
3. Parent and student reports on homework quality
4. Number of school hours devoted to academic work; number of hours devoted to non-academic activities such as assemblies, social events on a monthly basis, number of hours students who are pulled out of class for other services, etc.
5. Classroom use of time
    - smooth transitions
    - ending on time
    - classroom disruptions of any kind
    - amount of academic learning time (ALT); students' reports about their thought processes when engaged in learning activities to determine the quality of learning activities. (When students' thoughts are focused on "I can do it," and "here's how I can do it," achievement results are superior to those produced by thoughts unrelated to the task or reflect anxiety about the task.)
6. Number of office referrals during class time

Guiding Questions in Using Information from Indicators:

A. How does the school stress and communicate the need to center on quality academic learning time?
B. To what extent does the organization of the school calendar address the use of time for learning?
C. What do students and parents think about homework? Do students engaged in interesting learning activities at home as part of their assignment? Do students and parents think that homework is time well spent?
D. In the classroom, how do teachers manage classroom time? What strategies do they use to keep disruptions to a minimum? Do they have smooth transitions between classes or activities? Do they end their classes on time? Is a significant amount of the time used to engage students in academic learning time?
E. What is the average number of office referrals per month for the school?

Citations:

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SCHOOL ENVIRONMENT AND CLIMATE THAT PROMOTES LEARNING

8. Criteria: Effective schools hold high expectations for students, teachers, and administrators that are set and communicated to families, teachers, and students and provide incentives, recognition, and rewards to promote excellence.

What the Research Says: When schools and teachers hold expectations for students that are communicated schoolwide and in the classroom, these expectations can and do affect student achievement and attitudes. High expectations have been found to be a critical component of effective schools communicated through school policies and practices that focus on academic goals. Within the classroom, teacher expectations and related behaviors accounts for up to five to ten percent of student achievement outcomes. Communication of low expectations has more power to limit student achievement than communication of high expectations has on raising student performance. The effects of expectations is more profound for younger children than for older students. Overall, most teachers form expectations based on appropriate information, such as cumulative folder data and change their expectations as student performance changes. It has been found that while teachers often form realistic and appropriate expectations, "sustaining expectation effects" (i.e., expectations do not change as student performance changes) can occur and limit student learning and self-concept development.

A minority of teachers form expectations based on irrelevant factors such as students' SES, racial/ethnic background, or gender or view student ability as static, thus not able to respond to changes in performance to foster students' growth. These teachers are generally not aware of their thinking or behaviors. Teachers communicate differential expectations by treating low-expectation students in ways likely to inhibit their growth. For example, they expose low-expectation students to less learning material; give them less time to respond to questions, communicate less warmth and affection to them; give these student the answers or call on another student instead of giving clues or rephrasing questions as they do with high-expectation students; give briefer and less informative feedback; make less frequent use of effective but time-consuming instructional methods; or ask less stimulating, questions. These behaviors have been noted towards individual students and ability groups within a classroom, and in tracked classrooms. When teachers engage in differential treatment of high- and low-expectation students, students are quite aware of these differences. In classrooms with more equal treatment, low-expectation students have better attitudes. Through professional development, it is possible for teachers to become aware of their unconscious biases and differential treatment of students and be helped to make positive changes in their thinking and behaviors.

Effective schools recognize and reward excellence in achievement and behavior by ensuring that requirements for awards are clear, that explicit procedures are used, and that evaluations are based on standards rather than comparisons with peers. Opportunities for all students to excel are provided in students' areas of strengths. Administrators and teachers match incentives and rewards to student developmental levels, ensuring that they are meaningful to recipients and structures to build persistence of effort and intrinsic motivation. Older students are allowed considerable opportunity to manage their own learning and provide input into school policies and operations.

Administrator expectations for teachers. Administrators and other leaders communicate high expectations for teacher performance. Administrators promote a schoolwide belief that all students can be successful learners and work with teachers to meet the challenge of teaching them. Each teacher negotiates professional growth goals with the administrator who uses written supervision and evaluation procedures to provide teachers with performance feedback at least annually. Administrators use guidelines made in advance for classroom observations and provide teachers with quick feedback. Recommendations place emphasis on improving instruction and increasing student achievement. Administrators or leadership team establish troubleshooting routines to help teachers to quickly resolve instructional concerns. In turn, administrators hold high expectations for themselves, assume responsibility for student outcomes, and make themselves accessible to staff, students, parents, and community members.

Administrators and other leaders recognize excellence in teaching, using school objectives and explicit criteria for making judgments. Incentive and rewards are provided to teachers who expand their knowledge and expertise by taking credit classes, applying for grants, or pursuing other professional development activities. Teachers are recognized both informally and formally, with at least some rewards made publicly. Incentive structures are reviewed periodically for equity and effectiveness.

Effective Teacher Practices: How to Improve the Ways Teachers Form and Communicate Expectations

- Avoid unreliable sources of information about students' learning potential such as social stereotypes, biases of other teachers (gossip)
- Set goals for individuals, groups, and classrooms in terms of minimally acceptable standards (floors) and communicate that all students have the ability to meet those standards. Goals should be both challenging and attainable.
- Expect all students to perform at a level needed to be successful at the next level of learning; they do not accept that some students will fail.
- Use heterogeneous grouping and cooperative learning activities whenever possible. These approaches capitalize on students' strengths and take the focus off of their weaknesses.
- Develop structures in which students work on different tasks, on tasks that can be pursued in different ways or on tasks that have no particular right answer. This will minimize harmful comparisons.
- Emphasize that students are good at different things and let students see this is true by having them observe one another's products, performances, etc.
- Provide the time, instruction, and encouragement necessary to help lower achievers perform at acceptable levels. This includes giving them the same interesting and varied learning material provided for other students.
- Concentrate on extending warmth, friendliness, and encouragement to all students.
- Monitor student progress closely.
- Give all students generous amounts of wait-time to formulate their answers during recitations. This will increase participation and improve the quality of responses.
- In giving students feedback, stress continuous progress relative to previous levels of mastery, rather than comparisons with statistical norms or other students. Also, focus feedback on giving useful information, not just evaluation of success or failure.
- When students do not understand an explanation or demonstration, diagnose the learning difficulty by breaking down the task or reteach it in a different way, rather than merely repeating the same instruction or giving up.
- Think of stretching the students' minds by stimulating them and encouraging them to achieve as much as they can, not "protecting" them from failure or embarrassment.

Possible Indicators:

1. Goals that are expressed as minimally acceptable levels of achievement rather than using prior achievement data to establish ceiling levels beyond which students would not be expected to progress.
2. Policies that protect instructional time.
3. Policies and practices that underscore the importance of reading. For example effective schools have written policies regarding the amount of time spent on reading instruction daily, frequent free reading periods, use of a single reading series for continuity, homework that emphasizes reading, frequent sharing of student reading progress with parents, and strong instructional leadership.
4. Measurements of wait time during administrators class observations.
5. Staff members who hold high expectations for themselves as leaders and teachers, taking responsibility for student performance.
6. Slogans that communicate high expectations.
7. Positive learning climate such as the appearance of the physical school and the sense of order and discipline that pervades both instructional and noninstructional areas.

8. Insistent coaching or assistance of students who are experiencing learning difficulty
9. Written teacher evaluation procedures
10. Routines for teachers with instructional concerns

Guiding Questions in Using Information from Indicators:

A. Does the school have goals that are expressed as minimally acceptable levels of achievement?
B. Are there school policies and practices that protect instructional time?
C. Are there policies that underscore the importance of reading? What practices demonstrate the importance of reading?
D. Do all staff members hold high expectations for themselves and their students?
E. Are there school slogans that communicate high expectations? What are they?
F. How is a positive learning climate established and maintained?
G. What practices, approaches, and/or programs help students who have learning difficulties?
H. In what ways are students recognized for excellence in achievement and behavior? Is recognition based on standards rather than comparisons with their peers? How are standards clearly communicated to students? Are rewards and incentives developmentally appropriate for students?
I. Are teacher evaluation procedures written, emphasizing improvement of instruction and student achievement? Do teachers know how they will be evaluated? How frequently do classroom observations occur?
J. Do teachers have professional growth goals? How are they established and reviewed?
K. In what ways are teachers recognized for excellence?
L. Do curriculum materials provide activities that encourage multiple and open-ended answers?

Citations:

Amabile, Hennessy, and Grossman (1987); Anderson, C. S. (1985); Armor, et al. (1976); Bain and Jacobs (1990); Bain, Lintz, and Word (1989); Bamburg (1994); Berliner (1979, 1985); Block (1983); Block and Burns (1976); Bloom (1976); Boyd (1992); Brookover (1979); Brookover and Lezotte (1979); Brophy (1983, 1987); Brophy and Good (1986); Cantrell and Cantrell (1993); Cooper and Good (1983); Cooper and Tom (1984); Cotton (1989c, 1990a, 1991b); DeBevoise (1984); Dryfoos (1990); Duke (1989); Edmonds (1979a,b; 1981); Evertson (1986); Fenley, et al. (1993); Fullan (1990); Fullan and Stiegelbauer (1991); Gaddy (1988); Gall and Renchler (1985); Gersten, Carnine, and Zoref (1986); Good (1982, 1987); Good and Brophy (1986); Gottfredson, G. D., and Gottfredson, D. C. (1989); Gottfredson, D. C., Gottfredson, G. D., and Hybl, L. G. (1993); Gottfried and Gottfried (1991); Hallinger and Murphy (1985); Hawley, et al. (1984); Hord (1992a); Kearns (1988); Keedy (1992); Kenealy, Frude, and Shaw (1991); Leithwood and Montgomery (1982, 1985); Levine (1990); Levine and Eubanks (1989); Levine and Lezotte (1990); Little (1982), Louis and King (1993); Louis and Miles (1990); Madden, Lawson, and Sweet (1976); Marshall and Weinstein (1985); Mortimore, et al. (1988); Murphy and Hallinger (1985, 1988); Oakes (1989); Paredes and Frazer (1992); Patriarca and Kragt (1986); Pavan and Reid (1991, 1994); Porter and Brophy (1988); Pratton and Hales (1986); Purkey and Smith (1983); Rosenholtz (1985, 1989a,b) Rosenshine (1983); Sammons, Hillman, and Mortimore (1994); Saracho (1991); Shann (1990); Slavin (1991, 1994a); Sparks (1983, 1986); Stevens (1985); Stiller and Ryan (1992); Stringfield and Teddlie (1988); Teddlie, Kirby, and Stringfield (1989); Tracz and Gibson (1986); Vincenzi and Ayrer (1985); Wade (1985), Wilson and Corcoran (1988); Wilson-Brewer, et al. (1991); Woods (1995); Woolfolk and Brooks (1985);

SCHOOL ENVIRONMENT AND CLIMATE THAT PROMOTES LEARNING

9. Criteria: Effective schools establish, communicate, and enforce consistent, fair discipline practices and policies.

What the Research Says: Discipline can be both the prevention of discipline problems and the punishment intended to correct behavior at the classroom and school levels. Researchers have examined both of these aspects. Effective schools provide written codes of conduct clearly specifying student behavior, discipline procedures, and consequences. By providing initial trainings and periodic reviews of these codes, schools ensure that all staff members, students, and parents know the code of conduct. Schools create a warm, supportive school environment in which the principal is visible and personable in interactions with staff and students. Students with behavioral problems are assisted to develop social interaction, self-control, and anger management skills through the use of positive reinforcement for appropriate behavior; adapted commercial discipline programs (matched with local circumstances and needs); agreements with parents about ways to reinforce school disciplinary procedures at home; and projects to prevent violence and gang activity, as needed. Effective schools' staff engage in problem-solving with each other and with students to address discipline issues, focusing on causes rather than symptoms as well as activities to build self-esteem and belongingness. School staff participate in training activities to improve skills in prevention and remediation of violence and other discipline problems.

When behavioral problems are encountered, discipline procedures are administered quickly following the infraction. The disciplinary action is consistent with the code and all students are treated equitably. Students understand why they are being disciplined in terms of the code of conduct. Effective schools take action on absenteeism and tardiness quickly, usually within one day. Sanctions are delivered that commensurate with the offense committed. Discipline is carried out in a neutral, matter-of-fact way and is focused on the student's behavior, not their personality or history. By use of in-school suspension accompanied by assistance and support, effective schools avoid expulsions and out-of-school suspensions whenever possible.

Effective Preventive Practices:

Schoolwide Preventive Practices	*Prevention of Classroom Discipline Problems*
• Commitment on the part of all staff to establish and maintain appropriate student behavior is an essential precondition to learning. Well-disciplined schools have a schoolwide emphasis on the importance of learning and do not tolerate conditions which inhibit learning. • Staff share and communicate high expectations for appropriate student behavior. • Rules, sanctions, and procedures are developed with input from students, are clearly specified, and are made known to everyone in the school. Student participation in developing and reviewing school discipline programs creates a sense of ownership and belongingness. Widespread dissemination of clearly stated rules and procedures assures that all students, parents, and staff understand what is and is not acceptable. • Characterized by a concern for all students, a warm school is typical of well-disciplined schools. • Principals in well disciplined schools tend to be highly visible in hallways and	Effective classroom managers have been found to be more effective in preventing disruptions than ineffective managers. Specific effective teacher behaviors include: • "Withitness" - communicating to students by their behavior that they know what is happening in the classroom. • Overlapping - attending to different events simultaneously without being totally diverted by a disruption. • Smoothness and momentum in lessons - conducting brisk and smooth pacing and providing continuous activity signal or cues. Teachers make smooth transitions between activities. • Group alerting - attempting to involve nonreciting students in recitation tasks. • Stimulating seatwork - providing varied and challenging seatwork. • Holding and communicating high expectations for student learning and

classrooms, talking informally to teachers and students, speaking to them by name, and expressing interest in their activities. In contrast, in poorly disciplined schools, the principals are visible only for "official" duties such as assemblies, enforcing discipline. • Delegation of discipline authority to teachers. Teachers are responsible for handling routine classroom discipline problems while the principal deals with serious infractions. By arranging staff development, principals assist teachers to improve their classroom management and discipline skills	behavior • Establishing and clearly teaching classroom rules and procedures in much the same way as instructional content. Rules are periodically reviewed and are posted in elementary classrooms. • Specifying consequences and their relation to student behavior • Enforcing classroom rules promptly, consistently, and equitably. • Sharing with students the responsibility for classroom management • Monitoring classroom activities and providing feedback and reinforcement • Providing marginal students with opportunities to experience academic and social success. • Teaching students to attribute their success or failure to their personal effort • Enacting the above practices from the very first day of school.

Effective Disciplinary Actions

Enforcing School Rules:

- *Punishment, in some forms.* Punishment is commensurate with the offense committed. Effective, frequently used punishments include depriving student of privileges, mobility, or the company of friends. Also, punishment needs to be delivered with support for students to improve their behavior and assistance in learning how to do so.
- *Counseling.* Positive outcomes have been noted as a result of interviewing students to determine their awareness of their behavioral problems and the meanings that it holds for them, providing information and instruction when necessary, setting needed limits, and insisting that students assume personal responsibility for their behavior and its consequences.
- *In-school suspension.* In-school suspension that includes guidance, support, planning for change, and opportunities to build new skills has shown to be effective.
- *Contingency contracts.* Research supports the cooperative development and use of contingency contracts that specify the sanctions students will face if they do not behave in accordance with the terms of the contract.
- *Home-based reinforcement.* Structures in which students are given rewards (e.g., verbal, tangible, or privileges) and sanctions (e.g., loss of privileges such as TV time, snacks, or later bedtime) at home, based on their school behavior have been shown to improve student behavior.
- *Broad-based approaches.* In schools fraught with disorder, more broad-based approaches are needed to bring about real school environment improvement. Successful strategies include:
    1. Organizational restructuring of instructional and discipline programs. School teams are established to carry out improvement projects. The curriculum and discipline policy are reviewed and revised with input from all groups, including students. Academic innovations such as study skills instruction and cooperative team learning are implemented while climate innovations such as school pride campaigns and expanded extracurricular activities are instituted. In addition, career-oriented innovations are added to the curriculum.
    2. Increasing parent involvement is a critical element in improving order in troubled schools.

Remediating Classroom Discipline Problems:

- Intervene quickly when disruptions occur
- Use intervention strategies to prevent misconduct such as:
    1. Behavior modifications approaches through reinforcement and teaching self-control skills
    2. Structures that mete out rewards and punishments to groups based on the behavior of individuals within the groups
    3. Prosocial skills training that teaches self-awareness, values clarification, cooperation, and the development of helping skills
    4. Peer tutoring

Possible Indicators:

1. Expulsions and out-of-school suspensions
2. Tardiness and absenteeism
3. In-school suspensions
4. Discipline referrals from teachers
5. Preventive approaches or programs
6. Written code of conduct that articulates rules, sanctions, and procedures

Guiding Questions in Using Information from Indicators:

A. Is there a written code of conduct that articulates rules, sanctions, and procedures? How was the code developed and reviewed? Were students and parents involved? Is the code clearly stated? Do all teachers and students understand and know the rules, sanctions, and procedures?
B. What is the number of teacher referrals, expulsions and out-of-school suspensions? Are these numbers higher or lower than previous years?
C. What is the monthly/yearly percentage of absentees and tardies? Are these percentages high or low? Are the percentages much higher for certain ethnic groups or low SES students?
D. What activities are provided for students participating in in-school suspensions? Are they helpful to improve student behavior?
E. What preventive practices, approaches, or programs are available for promoting a well-discipline school?
F. Are high expectations for behavior clearly and visibly communicated schoolwide?
G. To what extent is the principal or leadership team visible to students and teachers? Or are they invisible, appearing only for "official" duties?
H. How does the school work to make it a warm and caring place? What practices are routine?
I. Does the school have a process to communicate with parents on students' behavioral problems such as notes, memos, and contracts for parents to use?

Citations:

Bain, H. P., and Jacobs (1990); Block (1983); Boyd (1992); Brookover and Lezotte (1979); Cantrell and Cantrell (1993); Corcoran (1985); Cotton (1990b); Doyle (1989); Duke (1989); Edmonds (1979a,b, 1982); Edmonds and Frederiksen (1979); Fenley, et al. (1993); Good and Brophy (1986); Gottfredson, D. C. (1987); Gottfredson, D. C., Gottfredson, and Hybl (1993); Hawley, et al. (1984); Lasley and Wayson (1982); Leach and Byrne (1986); Leming (1993); Levine and Eubanks (1989); Levine and Lezotte (1990); Madden, Lawson, and Sweet (1976); Render, Padilla, and Krank (1989); Rutter, et al. (1979); Sammons, Hillman, and Mortimore (1994); Short (1988); Staub (1990); Wayson and Lasley (1984); Weber (1971); Wilson and Corcoran (1988); Wilson-Brewer, et al. (1991).

SCHOOL ENVIRONMENT AND CLIMATE THAT PROMOTES LEARNING

10. Criteria: Effective schools provide supportive and physically safe environments.

What the Research Says: In supportive schools, teachers interact with students in positive, caring ways. Teachers share anecdotes and incidents from their own experiences as appropriate to build rapport and understanding with students. They pay attention to student interests, problems, and accomplishments in social interactions both in and out of the classroom. Teachers communicate interest and caring to students both verbally and through such nonverbal means as giving undivided attention, maintaining eye contact, smiling, and nodding. Student effort is encouraged by focusing on the positive aspects of students' answers, products, and behavior. Students are encouraged to develop a sense of responsibility and self-reliance. Administrators and teachers give older students, in particular, opportunities to take responsibility for school-related activities and to participate in making decisions about important school issues.

Safe and supportive schools maintain a strong emphasis on school as a place for learning. Many studies have demonstrated that in schools where students and staff support academic excellence, student achievement is higher. This appears to be valid across socioeconomic, academic, and grade level differences.

Research on school size consistently finds small schools more effective than large ones. An appropriate and effective elementary school size is 300-400 students and 400-800 students for a secondary school. The effectiveness of small schools has been documented to provide equal or superior academic achievement, more positive student and teacher attitudes toward school, and more positive student behavior (less truancy, disciplinary actions, violence, theft, substance abuse and gang participation.) Students in smaller schools also have a greater sense of belonging and higher general self-concepts. Poor students and those of racial and ethnic minorities are more adversely affected by attending large school than are other students.

Student learning also is enhanced in environments that are orderly. Security personnel reduce incidents of violence in schools. Orderly schools are not necessarily rigid but have a set of consistent rules aligned with school goals and policies. Rules provide for the safety of students while being flexible enough to support learning. The pressures of inner-city schools, for example, may require flexible responses especially to non-serious infractions. The stability promoted by orderly and consistent environments enhances positive relationships among all school members and an atmosphere of trust, caring and cooperation.

In effective schools, administrators and teachers provide a pleasant physical environment for teaching and learning. Staff and student input is regularly collected on facility needs such as repair, replacement, and cleanliness. The facilities are kept clean and damage is immediately repaired. Large facilities are sub-divided to increase communication and a sense of community. Classroom, meeting and storage space is sufficient for teaching and learning, conferences, inservice activities, etc. Hallways are cheerfully decorated with student products, seasonal artwork, posters depicting positive values and school spirit.

Schools facing climate challenges have met with success by increasing cooperation between school and community. School leaders collaborate with community agencies to support families with urgent health and/or social service needs. Preventive measures are used effectively to reduce violence and aggression in schools. Intervention and diversion programs are developed in cooperation with community leaders, law enforcement agencies, and psychological and educational assessment professionals. Programs which include counseling, violence prevention classes, and support for regular academic work have a positive effect on student recidivism rates. Student trust and confidence are enhanced through support programs.

A large amount of research now indicates that parental involvement is an important ingredient in improving individual children's achievement and enhancing school effectiveness. Students whose parents and families are involved in the school tend to have better attendance, behavior and grades as well as higher achievement and self-

confidence. This is evidenced in families across ethnic, gender, and social lines. Involvement of parents and families seems to be enhanced when teachers have more positive and understanding attitudes toward parents and families in the community and communicate with parents and families in an open, collaborative manner

Effective Practices, Approaches, Programs:

Small School Approaches

To obtain the benefits of small schools, many large schools are using approaches to creating schools-within-schools. To reap the benefits associated with small schools they must have separate administration, programs, culture, and goals. Some approaches currently being used are:

- "Vertical House Plans" where high school students are assigned to a "house" of a few hundred students in grades 9-12 with its own structure.
- "Ninth Grade House Plan" in which ninth graders have their own "house" within a larger high school.
- "Special Curriculum Schools" that organize students based on special needs or interests such as technology, performing arts or language immersion programs.
- "Charter Schools" that develop in response to a particular focus recognized by the community and teachers.

Practices to Provide a Supportive and Safe Environment for Learning

School/Community-Wide Practice	*Classroom Practices*
• The learning environment is characterized by warmth, concern and respect for others. Honest, open communication is the norm. - Staff greeters or "School Mom" may be used at the school entrance or a posted to welcome students and parents - An atmosphere of celebration and humor predominate - Caring teams may be created to build long-term, family-like groups. • Strong leadership guides the instructional program with clear goals and objectives. A yearly focus/mission is adopted. • School community continually strives to improve instructional effectiveness. - Individual student academic achievement, behavioral, social, health and social service needs are reviewed annually - Collaborative relationships with local businesses, universities, senior centers, other schools are nurtured. • Student achievement is appreciated and recognized to build strong motivation school-wide. • School rules are clear, made public, and consistently enforced. - To resolve conflicts and cope with trauma, crisis intervention personnel are identified, approaches and conflict resolution plans are developed. - Staff development is used to increase coordination of student services. • The physical environment is pleasant for learning.	• Teachers pay attention to student interests, and lives in and out of school. Class meetings, Student-As-Expert workshops offered by students for fellow classmates, or Student of the Week presentations provide opportunities to recognize individuals • Teachers focus on the positive aspects of students' school work, and behavior. For example: Daily "Put-ups" are posted (rather than put-downs) to honor good classroom citizenship. Student work is prominently displayed around the classroom • Interest in students is communicated verbally and non-verbal. Class meetings are held where students participate in problem solving to address problems. Teachers provide time to give individual students undivided attention. • Students are encouraged to develop responsibility and self-reliance as contributing members of their community. Older students take responsibility for school-related activities such as announcements, crossing guard, school store, school tours, or as student conflict mediators. • Teachers have a clear understanding of the schools' mission and communicate the mission to students and parents. Classroom climate is designed to further the mission • Student progress is regularly monitored; individual and class standards are set • Innovative and motivational curricula are used to maximize learning. • Objective systems are established for consistent but judicious recognition of students for academic achievement and excellent behavior. • Recognition and rewards are specific to student achievement and not random. Competitions pitting students against each other are minimized. Science fairs, field

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-- Administrators seek school and community input on facilities needs - repair, replacement, refurbishing, cleanliness. -Staff and parents have a visible presence at jr./sr. high dances, in halls, isolated areas or "hot spots." Walkie-talkies may be used to monitor school. • Parents are told repeatedly of the need to be involved in students' school life, the instructional program, and school governance. -Newsletters are easy-to-read and highlight important information or opportunities such as adult education classes, parenting workshops, coordinated family services, parenting books in the library/parent room, weekly parent coffees/rap groups with school personnel.	days, fund raisers are cooperative efforts rather than competitions. • Students are aware of rewards and how to get them. Awards are developmentally appropriate, tangible, and available to students at different levels and to cooperative groups. • Teachers engage students in taking an active role in the maintenance of their classrooms and the school and grounds as a whole. Teachers communicate a sense of pride in the appearance of the classroom/school. Students take responsibility for clean-up of various areas. Athletic teams assist in maintaining fields, track and equipment inventories. • Parent participation is sought out and emphasized as important. Teachers have an open-door policy and foster the parent-school relationship through weekly communications. A variety of volunteer opportunities are available to parents throughout the year.

Possible Indicators:

1. School Climate Inventory Instrument administered periodically (once every 2-3 years) to collect data from teachers and students
2. Number of staff, students, parents, and community members involved in developing a school mission statement/shared vision
3. Data on student violent acts, suspensions, expulsions, and disciplinary actions
4. Number of disciplinary referrals by grade level, gender, S.E.S. and racial/ethnic groups
5. Widespread approval of the process for handling conduct violations in school
6. Programs and support to help high-needs students to achieve school success
7. Extent that referrals for health/social services and other assistance services are coordinated
8. School leaders and staff collaboration with community agencies to support families with urgent health and/or social service needs
9. Attendance at open-houses, back-to-school night, student conferences
10. Tabulating and tracking parent/community volunteerism
11. School-community liaison exists and is used to foster community outreach
12. School-business-community partnerships are used to support instructional effectiveness

Guiding Questions in Using Information from Indicators:

A. In what ways are high expectations for achievement and behavior communicated in classes and schoolwide?
B How are students, parents, volunteers, visitors, greeted as they come in the building/off the bus?
C How do administrators and office personnel interact with school members?
D Are there opportunities for students to take responsibility for their school?...participate as members of the community during and after school?
E How are students monitored while in school?
F. How are student successes celebrated?

G. Is there an emergency response plan?
H. In what ways are parents and families regularly told that their participation and support makes a great deal of difference in their children's school performance?
I. Is parent/community involvement encouraged from the time children enter school through high school?
J. Do administrators and teachers involve parents and community members in supporting the instructional program and school governance?
K. Do students, parents, and staff feel safe in and around the school?

Citations:

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SCHOOL ENVIRONMENT AND CLIMATE THAT PROMOTES LEARNING

11. Criteria: Effective schools provide an electronic community for instructional support and classroom activities that simulate real life/workplace situations.

What the Research Says: Recent yet limited research indicates that when access to educational technology is sufficient, it has a significantly positive effect on achievement and student attitudes in all subject areas, across grade levels. These positive changes occur over time when students are in a school environment in which technology is readily accessible and integrated into the curriculum. In technology-rich learning environments students take more responsibility for their own learning and teachers function as facilitators and coaches rather than lecturers, giving older students more responsibility for their own learning. An electronic learning community makes instruction more student-centered, encourages cooperative learning and stimulates increased teacher-student interaction. Research shows that the use of computers and word processing software foster the development of research and writing skills.

Model projects such as National Geographic's Kidsnet and the Star Schools project have recognized teacher training as a key component to successful use of technology. Programs such as these have demonstrated the success of providing teachers and students access to technologies and information used by scientists, technicians, physicians and other professionals in a learning environment that encourages exploration, collaboration and experimentation. Training enables teachers to use computer-assisted instruction effectively. In addition to training , accessible ongoing teacher support for technology increases teacher's comfort level and classroom use. Teachers are found to change their preparation, materials, planning, and lesson design when immersed in an electronic community. Technology enables teachers to base learning activities on students' learning needs and styles, rather than adhering rigidly to textbooks or lesson plans.

Effective teachers integrate workplace readiness skills into content-area instruction. They communicate to students of all ages that development of employability skills is important and provide age-appropriate learning activities that develop dependability, positive attitude toward work, conscientiousness, cooperation, adaptability, and self-discipline at all levels, K-12. Assignments and projects in various content areas focus on developing the higher-order skills required in the modern workplace--problem-solving and decision-making skills, learning strategies, and creative thinking. The relevance of learning material is demonstrated by showing how it relates to other courses and to workplace applications.

The value of employability skills is reinforced when teachers select workplace problems that illustrate how basic academic skills are applied in real-world settings. Such problems may provide students with experience in group projects which require these skills. The use of computer-assisted instruction is most effective as a supplement to--not a replacement for--traditional, teacher-directed instruction. Chronically misbehaving students and students with negative attitudes toward traditional learning methods show improvement with computer-assisted instruction. When high-interest drill-and-practice programs are provided as part of instruction, they contribute to improvements in learning, especially with students requiring skill remediation. An effective way to organize the secondary curriculum is by broad occupational themes. In this context assignments parallel those of real people in the workplace.

Effective Practices, Approaches, Programs: All of the practices listed below provide substantial teacher training, access to computers, flexibility in curriculum and planning, and an extended-time experience for students.

Examples of Real-world Problem-solving in Mathematics and Science:

- Middle school and high school students do field research, collaborate with scientists on-line and contribute to a state-maintained data base in the *Student Watershed Research Project* (Oregon.) Classes are assigned a section of river to monitor. Students test water quality, report test findings in a database, and share their findings with other schools in an annual summit.
- The *GLOBE* project engages K-12 students, educators and scientists from around the world in researching, collecting data and sharing results of environmental studies. It allows teachers to coach students in a scientific inquiry. Global images, and a central processing facility are used to connect students with environmental scientists and other classrooms to improve understanding of worldwide environmental issues.
- *S.T.A.R. Lab* at Harriet Tubman Middle School, in Portland, Oregon is a cooperative effort between the school, the Battelle Corporation, and is supported by local science and research businesses such as CH2M Hill (an engineering firm.) Students work in teams to solve realistic science or technology problems. The project uses an authentic simulation of a laboratory, real research problems, and an integrated economic simulation where students earn "wages" which can be used on "apartments," "cars," printing documents, new passwords, or for research project materials. Technology is used to develop skills in job responsibility, computer use, research, personal finance, and various science and technology fields.

Examples of Interdisciplinary Approaches:

- *Project INSITE* (Indiana) provides students with the opportunity to be involved in hands-on science where they design investigations, collect data, research related issues and communicate findings in a professional presentation. The project is based on the Concerns Based Adoption Model (Hall et al 1973) and emphasizes in-depth teacher training in science skills, and teaching methodologies to create a positive and inclusive learning environment.
- In the *FutureMakers* project middle school classes partner with a business mentor to solve workplace problems. Students visit the worksite and observe problem areas, they learn to brainstorm, generate potential solutions to problems and develop a prototype (for example: the silverware sorter, the universal pie cutter, or packaging recycler.) Students collaborate with business mentors and present their prototype solutions or "inventions" at an annual Invention Convention.
- Students participate in a real-world issue such as the *Endangered Species Project* (Oregon) by applying technology to research and presenting findings or plan of action. Students learn and apply strategies from sciences, computers, mathematics and social studies and link with community resources. Extensions of the projects find students volunteering at local museums, zoos, or special events such as Earth Day.
- Long-term *classroom simulation of a worksite* where students play key roles in the planning, management and production of a product such as a newspaper. Teams of students are responsible for various aspects of the newspaper with roles such as researcher, technical writer, interviewer, editor, fiscal officer, distribution or advertising. Team problem-solving, work ethics and use of appropriate technology are integrated into the project. Students explore how the whole industry works rather than learn isolated skills. Spreadsheets, word-processing, Internet and database searches, are regularly used by students.

Possible Indicators:

Note: The impact of an electronic community is not rapid. Changes must be measured over time with attention to the way technology is used in the school.

1. Traditional standardized tests (*California Achievement Tests, Iowa Tests of Basic Skills, Watson-Glaser Critical Thinking Appraisal, Test of Cognitive Skills*)
2. The *Student Attitudes Toward Education and School* (Texas Center for Educational Technology) -- an instrument to measure changes in student attitudes
3. *Student Attitudes Toward Technology* (Texas Center for Educational Technology) -- measures student acceptance of technology
4. Depth of training in technology for teachers, support staff and administrators
5. District/school computer support services
6. Extent to which technology is used district-wide (age and number of computers plus Internet connections, administrative and library use)
7. Teacher use of computers as tools for problem-solving, within subject areas, workplace simulations, reducing instructional problems
8. Parent and family survey

9. Measures of business and community perception of worker readiness
10. Nature and amount of computer use by students per week, term, year.

Guiding Questions in Using Information from Indicators:

A. What changes occur over time in students cognitive, problem-solving and workplace skills with the use of technology?
B. How does the teacher's role change with increased use of technology?
C. Is the use of computers/development of an electronic community an integral part of the school/district plan?
D. Is computer use coordinated within the school/district?
E. How are scheduling problems handled?
F. Is there equity in terms of access, resources, time allocation, quality of technology?
G. Do teachers have access to computers to support instruction and reduce their workload?
H. Do parents and families have access to school computers before/after school?
I. What links are established between the business community and the school environment?
J. What opportunities exist for students to see technology being used in the workplace?

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Bahr and Rieth (1989); Bangert-Drowns (1985); Bangert-Drowns, Kulik, and Kulik (1985); Beach (1982); Bennett (1991); Berryman (1988, 1991); Braun (1990); Capper and Copple (1985); Cotton (1993a); Darter and Phelps (1990); Dickinson (1986); Ehman and Glen (1987); Evans and Burck (1992); Fletcher, Hawley, and Piele (1990); Foster, D E., Engels, and Wilson (1986); Gore, et al. (1989); Gregson (1992); Gregson and Bettis (1991); Gregson and Trawinski (1991); Hall, G. E., Wallace, R. C., Jr., and Dossett, W. A. (1973); Hamilton (1990); Hull (1993); Keuper (1985); Kinnaman (1990); Kulik and Kulik (1987, 1991); Liao (1992); Mevarech and Rich (1985); Meyer and Newman (1988); Parnell (1994); Robertson, et al. (1987); Roblyer (1989); Rodrigues and Rodrigues (1986); Rupe (1986); Ryan (1991); Stasz, et al. (1990, 1993); Stemmer, Brown, and Smith (1992); Stennett (1985); Stone, et al. (1990); Voc. Ed. Weekly (1993); Wentling (1987); Woodward, Carnine, and Gersten (1988);

CURRICULUM, INSTRUCTION, AND ASSESSMENT

12. Criteria: Effective schools plan curriculum, instruction, and assessment based on clear student standards and objectives.

What the Research Says: Effective schools plan their curriculum, instruction, and assessment based on clear student standards and objectives. They use student information such as performance data, grades, attendance and community profiles to identify potential problems and to make changes in curriculum and instructional programs. The building (and when available the district) curriculum resources are used for instructional planning. Clear relationships among student learning goals/standards, instructional activities, and student assessment are established and are documented in written format. During the curriculum planning process, administrators and teachers engage in a collaborative decisionmaking process to build continuity across grade levels and content areas. All teachers understand and know where their instruction fits into the curriculum. Students are provided with an engaging and relevant curriculum based on their needs and experiences. The curriculum is evaluated for equity, cultural sensitivity, and cultural responsiveness. The school staff work with each other, the students, parents, families, businesses and other community members to promote understanding of the curriculum and the priorities within it. Effective schools support the curriculum with appropriate resources, including hands-on materials and resources from businesses and the community, in addition to textbooks. Finally, the curriculum is periodically reviewed and aligned across grade levels to ensure consistency and congruence with school and district student standards and respective changes.

When possible the curriculum is integrated. Although there are many different definitions of integrated curriculum, all of the definitions include: a combination of subjects, an emphasis on projects, use of sources that go beyond textbooks, relationships among concepts, thematic units as organizing principles, flexible schedules, and flexible student groupings. Possibilities of integrating traditional subjects-area content around broad themes are first explored and areas identified where this approach is appropriate. Emerging research supports the positive effects of curriculum integration to: 1) help students apply skills, 2) lead to faster retrieval of information, 3) provide multiple perspectives lead to more integrated knowledge base, 4) encourage depth and breadth in learning, 5) promote positive attitudes in students, and 6) provide for more quality time for curriculum exploration. Research on implementation of integrated curriculum stresses the importance of time to allow teacher teams to work on integrating the curriculum, select themes, plan instructional strategies, explore resources, coordinate teaching schedules, and develop assessments. Curriculum integration should be pursued gradually, allowing teachers to make adjustments, gain feelings of ownership, and evaluate the success of their efforts. Because integrated curriculum is an innovative approach for many non-educators, targeted efforts need to be made to inform parents, families, and community members of the research and experience supporting curriculum integration and to engage their support.

To guide their instructional planning, teachers use a preplanned curriculum that also allows for flexibility in curriculum content and delivery. Learning goals and objectives are developed, sequenced to facilitate student learning, and organized into units or lessons. Timelines for units and lesson objectives are established. Instructional resources and teaching strategies are identified and matched with learning objectives and student developmental levels. Resources and learning activities are reviewed for content, student appropriateness, and cultural and gender equity, modifying them as needed to increase their effectiveness in helping students to learn. When possible, teachers plan for the integration of traditional school subjects by using thematic units as organizing principles. Finally, teachers use a calendar to plan their daily, weekly, and monthly activities to ensure the availability of resources and instructional time.

Effective schools design or select student assessments as they plan curriculum and instruction. Student assessment is not an afterthought. Effective schools engage in professional development to build their assessment skills, to evaluate the quality of their assessment methods and data, and to ensure that assessment methods are valid measures of the standards selected. Additionally, staff development activities are arranged to build alternative assessment skills, such as establishing student standards, developing scoring rubrics or guides, designing performance tasks, and managing portfolio assessments. Schools coordinate assessment activities with district and classroom efforts to ensure a more complete picture of overall student performance and to minimize duplication of effort. At both the school and classroom levels, assessment methods are carefully planned and reviewed for alignment with the curriculum and actual instruction.

Examples of Effective Curriculum Approaches:

Integrated Curriculum. Integrated curriculum is an effective approach if it reflects school goals and student objectives. Overall there are six essential components of an integrated curriculum including: 1) core skills and process - these include basic skills such as reading and mathematics, as well as social skills and problem solving, 2) curriculum strands and themes - theses are the organizing principles around which the curriculum is built. They are broad such as "community", "change", or "systems" and integrate content from multiple areas; 3) major themes - each strand is further divided into major themes such as environments or diversity; 4) questions - major themes are further defined by questions that focus activities; 5) unit development - from the major theme and the questions, knowledge and skills related to the concepts are identified, and teachers plan activities that will lead to the development of knowledge and skills that will answer the questions. Teachers also collect resources and develop actual lesson plans and assessment strategies; and 6) evaluation - through an assessment, the unit is evaluated.

Waldo Middle School, Salem, Oregon: Integrating Middle School Curriculum Around Real-World Issues. Engaging students in real-world problem solving as they acquire the skills and knowledge needed for success in work and life is an important part of the curriculum at Waldo Middle School. The school experienced a significant increase in the number of poor and minority students and a raise in free/reduced lunch from 60 percent to 75 percent. Committed to the process of school improvement, the school and the district has been revising its curriculum, instruction, and assessment to align with its 21st century student learning goals.

From these efforts emerged the seventh grade Endangered Species Project, a model of how schools can develop and refine a more integrated and performance-based approach to teaching and assessment that provides hands-on and technology driven instruction, community learning, and alternative assessments. The Endangered Species project runs for eight weeks and is offered twice a year. It has four components, three of which have undergone considerable development:

1. Integrating the seventh grade curriculum in life sciences, writing, computers, math, and social studies around a contemporary, real-world issue that engages students' interest - endangered species.
2. Applying technology and pursuing other hands-on learning experiences in ways that relate to real problems and tasks that people face in the world of work.
3. Linking with the community to provide rich information resources, community learning, and a sense of realism to the project.
4. Conducting student assessments in the areas of applied math and science, technology use, collaboration, and communication (speaking, writing, and visual forms).

In the first phase of the project called the "Student Research and Paper," the project begins in life sciences class where students learn about endangered species. Students conduct their own research on an animal of their choice, drawing from a rich array of resources such as CD-ROMs, journals, and field experts. Students interact with field experts from regional zoos and from the country who have agreed to participate, communicating by voice, Internet, and in person. After conducting their research, students are given a writing task as part of their English class. Each student writes a report on their animal and works with their group to develop and write up a recovery plan on a word processor in computer class. Simultaneously, students learn about the environmental and political issues surrounding endangered species in their social studies class. In math, the teacher explains how probability relates to genetic variability, which is the key concept in explaining and preventing species extinction.

"Developing a Recovery Plan" is the second phase of the project. Students work in small groups to develop a recovery plan for their endangered animals. Students self select into these groups based on the animal of interest. The teacher helps students plan a timeline and a division of labor to complete the work in time for presentation day. Students are given a worksheet list of possible tasks so that each student can sign up for one or more of them. The list includes computer tasks such as designing a three dimensional image of a park or an information brochure, and non-computer tasks such as building a model or drawing a poster. Students are challenged to design a recovery plan that can take the form of a habitat theme park, a plan to preserve the animal in its natural habitat, or a captive breeding program within an existing zoo. In computer class, students use a variety of software, including word processing, spreadsheets, hyper-text stacks, and computer-aided design to produce their plans.

The third phase is the "Culmination Activity" is a presentation to the "Board of Directors." Students present their plans to a hypothetical zoo "Board of Directors." An entire day is set aside for the activity so that regional zoo experts can participate. Each student group is given 15 minutes to present and defend their plan, convincing the board that the proposal deserves funding. The panel asks questions and offers a critique at the end. The teacher who has worked closely with the group completes a performance evaluation sheet of the presentation. Parents are encouraged to attend the presentation. For those parents who can not attend during the day, there is a practice night to which parents are invited.

The staff at Waldo are developing performance assessments around the Endangered Species project that focus on : 1) applying concepts of conservation biology in the recovery plan, 2) collaborating with the group to share knowledge and develop the recovery plan, 3) word processing the research paper, 4) presenting the recovery plan, and 5) developing support materials using a computer and other media.

Student-Centered Curriculum. At South Colby Elementary School (K-6), Port Orchard, Washington on the Kitsap Peninsula, the school's goals focused on positive attitudes towards learning and reading and increased reading ability. The school reported that too many children were "turned off" to learning by the sixth grade, demonstrated poor attitudes towards learning and homework, and were unwilling to read. In 1987, the principal began to study research on retention, early childhood education, and alternative teaching methods. Research findings were shared with the school staff who became involved in discussing the research. Informal discussions eventually progressed to biweekly meetings before school. From these activities evolved a schoolwide commitment to developing a program which would engage the learning interests and abilities of children, while reducing retentions and special education referrals.

The school has made a commitment to: a whole language approach to reading; a thematic, integrated curriculum; cooperative learning techniques, and math programs emphasizing the use of manipulatives. Children have many opportunities to be active, decision-making participants, resulting in much less teacher-directed activity. The fourth/fifth/ sixth grades are grouped together with the expectation to have multi-age groupings in the lower grades. All classes engage in cross-age tutoring. There are monthly award assemblies at which two special awards are presented: the Principal's "Good Work Board" and "Super Students of the Month". For the former award, teachers select children who have produced excellent work on one assignment; Students of the Month are usually one or two per classroom who typify the award title.

Primary classrooms are organized into interest centers, allowing children to select and pursue topics and developmentally appropriate activities of their own interest. Blocks and many other manipulatives are available in all kindergarten and first grade classrooms. For example, one kindergarten classroom environment is carefully organized with opportunities for creative play, exploration, and problem solving. Typical areas such as easels, water table, science, art, listening, manipulatives, blocks, library, and puzzles are supplemented by a large, well equipped doll house, a store corner, a stage, dress-up area, a paper chain table, a junk art bin, a rabbit cage, and an antique typewriter. Each of these centers is presented in an open-ended way that does not require or demand a particular type of usage or responses from children. Children work alone, in pairs, or small groups while the teacher moves among the activities to facilitate or extend the children's pursuit. The teacher works with the children on planning, recording, and reviewing their work.

At the first grade, children engage in a daily period called DEAR or Drop Everything and Read that involves solo or buddy reading. The teacher rotates among the children carrying a set of cards on a ring (one card for each child) that she uses to record the answers children give to a set of comprehension questions that she asks. The multi-age classroom have a daily period known as "Resource Base Learning." Although children function in many different heterogeneously organized groups in their classroom, during this period children are organized by age level to pursue research skills. Research tasks founded on an analysis of the scope and sequence of skills targeted for the fourth, fifth, and sixth grades are integrated into the curriculum through a simulation game in which class members imagine themselves as a group from another planet traveling through space and preparing to land on Earth. Each group studies different, grade-level appropriate aspects of this earth landing.

Possible Indicators:

1. Curriculum planning guide and/or written curriculum framework addressing: student standards, academic focus, thinking skills focus, instructional strategies, assessment strategies, group process skills, cultural awareness, school-to-work, technology, family communication, and program and service coordination
2. Evidence of curriculum alignment with student standards, instruction, and assessment
3. Plans for curriculum integration within the school or implementation of curriculum integration
4. Student performance and community profiles
5. Plans and designs such as blueprints for school and classroom assessments

Guiding Questions in Using Information from Indicators:

A. To what extent, does the curriculum, instruction, and assessment match with the student standards?
B. Are school profiles of student achievement developed for each grade level and disaggregated by gender and ethnic group? How is this information used to identify problem areas and what changes were made in instructional programs and/or school procedures as a result?
C. How is the curriculum planned and developed? Who is involved in the process? What information is collected on students, their families, and communities? How is the information used in planning the curriculum and instruction? How often is the curriculum reviewed?
D. To what extent does the curriculum planning guide or curriculum address these areas:
   - Frameworks and standards - Is there a matching between the curriculum and student standards and the state curriculum content framework? Is there an awareness of national standards?
   - Academic focus - Is there academic focus on all areas: communicating (reading, speaking, writing, and listening), math (computing and problem solving), social sciences, science (process skills and conceptual understanding), using technology, foreign language, and the fine/performing arts?
   - Thinking skills focus - Are different thinking skills identified within the curriculum such as fostering positive attitudes (classroom climate and tasks), acquiring and integrating knowledge, extending and refining knowledge, using knowledge meaningfully, and habits of mind (critical thinking, creative thinking, and self-regulated thinking)
   - Instructional strategies - Are instructional strategies addressed such as storyline, learning centers, cooperative learning, independent project, research, integration, questioning strategies, direct/guided instruction, and differentiating curriculum (concrete to abstract)?
   - Assessment strategies - Do assessment methods match with student learning goals? Are appropriate assessment methods such as performance-based assessments, project/product, observations, test (teacher-made and standardized), learning logs, inventories/checklist, reflection logs, work samples, interviews, and portfolios matched with instruction?
   - Cultural awareness - Is cultural awareness interwoven into the curriculum? Is it reflected in the materials used? Is it infused in all content areas? Are major cultures included? Is awareness and respect for diversity communicated?
   - Technology - What forms of technology such as laser disk, video camera, Macintosh, Apple, calculators, CD ROM, modem use, Internet are addressed?
   - Real world applications or school-to-work - Are different real world applications incorporated into the curriculum such as project/product approach, simulations, field experience, mentoring, job shadowing, real world examples, authentic tasks, community service?
   - Group process skills - Does the curriculum highlight group process skills such as tools for working together effectively - communication skills, decision making, problem solving, class meetings, setting group agreements?

- Family communication - To what extent are different forms of family communications such as newsletter, program/presentations, brochure, letters, portfolio, conference, used to communicate about the curriculum?
- Program and service coordination - To what extent does the curriculum address coordination/integration with other programs including, Title 1, ESL, special education, counseling, social work services, and TAG?

E. Is integrated curriculum part of the overall school curriculum? Are teachers provided with time together to plan as a team? How often? (Everyday, once a week, etc.?)

F. How is student assessment planned? How do the assessment measures relate to the curriculum and instruction? What kind of assessment needs does the school have? How are these needs being met? To what extent are teachers using alternative assessments within their classrooms?

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13. Criteria: Classroom and instructional strategies are utilized that support and promote student learning to attain student standards.

What the Research Says: In effective schools, teachers set high expectations for students that are communicated to students and their families. All students are expected to meet them. Teachers expect students to perform at a level needed to be successful at the next level of learning. Teachers do not accept that some students will fail. Students are rewarded for excellent performance that is defined by objective standards, not by peer comparison. Teachers create warm, caring and supportive environments, providing students with opportunities for meaningful participation, involvement, and roles of responsibility. They give high needs students the extra time and instruction they need to succeed and support their social and academic resiliency. In the classroom, teachers promote respect and positive relationships among culturally and economically diverse groups. Diverse and flexible instructional groups are employed to promote effective instruction and student learning. When introducing new concepts and skills, teachers use whole group instruction. Smaller groups are formed to make sure that all students learn thoroughly. Teachers place students in achievement groups for short term learning activities, avoiding underplacement. Heterogeneous cooperative learning groups as well as peer tutoring and self-selected groups are set up to promote learning. Additionally, research supports multiage grouping at the elementary school level as an effective strategy for promoting achievement and affective growth. Teachers ensure that learning groups exhibit gender, cultural, ability-disability and socioeconomic balance.

Developmentally appropriate instructional strategies are used to help build students' higher order thinking skills by encouraging students to reflect on their own progress and learning. Instruction is provided in study skills such as paraphrasing, outlining, developing cognitive maps, and using advanced organizers. Giving students ample opportunities to practice and refine skills, teachers instruct students on strategies for problem solving, decision making, exploration, classification, and hypothesizing. Students are provided with opportunities to gain in-depth knowledge and to see the connectedness to the world beyond the classroom. To help develop students' ability to think about their own thinking (i.e., metacognitive skills), teachers ask students higher-order thinking questions and give them generous amounts of time to respond to such questions. Student responses are probed, redirected, and reinforced to improve their quality. Teachers incorporate computer-assisted instructional activities into building thinking skills such as verbal analogy, logical reasoning, induction/deduction, elaboration, and integration. Maintaining a supportive classroom environment can provide the safety and comfort that students need to be encouraged to experiment with new ideas and practices. Instructional strategies and materials reflect cultural and geographical sensitivity in a non-biased manner. Finally, research has shown that the use of specific thinking skill development programs and/or infuse thinking skill instruction into content-area lessons are both effective approaches.

Teachers use strategies that enable students to apply their learning in integrated or interdisciplinary projects. When appropriate, teachers integrate traditional school subjects by using thematic units, organizing themselves into teams, engaging students in projects that require knowledge and skills across content areas, and using performance assessments that allow students to demonstrate their knowledge and skills. Student input is included when determining themes around which to organize instruction. Workplace readiness skills are integrated into content-area instruction. Teacher communicate to students of all grades the importance in developing employability skills. Instruction focuses on developing the higher-order skills required in the modern workplace such as problem-solving and decision-making skills and learning strategies. Activities are developed that foster the development of qualities such as dependability, positive attitude to work, conscientiousness, cooperation, adaptability, and self-discipline. Secondary students are provided with classroom environments that replicate key features of real work settings and with tasks similar to those done by employees. Learning activities are based on students' learning needs and styles, rather than strictly adhering to textbook or lesson plans. Teachers function more as facilitators and coaches than as lecturers and experts thus giving older students much of the responsibility for their own learning.

Effective Instructional Practices and Approaches:

Important factors for successful multiage programs - an effective strategy for promoting academic achievement and affective growth:

- Supportive parents who have been well informed and actively involved.
- Flexible principal who is supportive and understands the change effort.
- Cooperation and ongoing communication among all stakeholders.
- Ongoing staff development that focuses on the change effort and includes the whole staff working and learning together.
- An understanding and belief in multiage instruction as a tool for addressing and respecting the diversity of how children develop and learn.
- Using open-ended teaching strategies such as hands-on science and math, whole language, and cooperative learning to ensure student success. Other strategies facilitative of multiage programs include: teaching partners and teaming, inclusion of support programs, student goal setting, project learning, alternative assessment, student choices, performance and narrative reporting, multiple intelligences, shift to trade reading books, process writing, use of community volunteers, use of schoolwide themes, integration of content, cross-age tutoring, schoolwide focus on multiage, adaptation of textbooks, and emphasis on arts.

Effective questioning techniques to use with students:

- Make use of classroom questioning to engage student interaction and to monitor student understanding.
- Structure questions so as to focus students' attention on key elements in the lesson.
- Ask a combination of lower-cognitive (fact and recall) and higher-cognitive (open-ended and interpretive) questions to check students' understanding and stimulate their thinking during classroom recitations.
- Ask lower-cognitive questions that most students will be able to answer correctly when helping students to acquire factual knowledge.
- Ask a majority of higher-cognitive questions (50 percent or more) of students above the primary grades during classroom recitations.
- Allow generous amounts of "wait-time" when questioning students—at least three seconds for lower-cognitive questions and more for higher-cognitive ones.
- Continue to interact with students whose initial responses are inaccurate or incomplete, probing their understanding and helping them to produce better answers.
- Make certain that both faster and slower learners have opportunities to respond to higher cognitive questions and are given sufficient wait-time.

Integrating workplace readiness skills:

- Teach the value of employability skills inductively, by having students experience how group projects are affected by the presence or absence of these skills.
- Use work-based learning experiences to reinforce basic skills.
- Select workplace problems to illustrate how basic academic skills are applied in real-world settings.
- Demonstrate the relevance of learning material by showing how it relates to other courses and to workplace applications.
- Organize the secondary curriculum around broad occupational themes/categories.

Ways to support social and academic resiliency of high needs students:

- Communicate warmth and encouragement to high-needs students, comparing their learning with their own past performance rather than making comparisons with other students.
- Work together to assure that each high-needs student has an ongoing supportive relationship with at least one school staff member.
- Create opportunities for these students to develop supportive peer relationships and serve as peer resources to one another through activities such as youth service, cooperative learning, and peer and cross-age tutoring.
- Teach problem-solving skills and provide opportunities for students to practice real-life application of these skills.
- Help each student to develop an internal locus of control by calling attention to the relationship between individual effort and results.
- Encourage family members and other key persons in the lives of high-needs students to continually express high expectations for their behavior and school achievement.
- Encourage key people in these students' lives to involve them in making real and meaningful contributions to the family and community.

Strategies and approaches for high needs students:

- Use approaches such as tutoring, continuous progress and cooperative learning with young children to reduce the incidence of later academic difficulties.
- Monitor student learning carefully to maintain awareness of students having frequent academic difficulty; note problems and arrange for help as needed.
- Communicate high learning and behavioral expectations to high-needs students and hold them accountable for meeting classroom standards.
- Provide high-needs students with instruction in study skills and in the kinds of learning strategies used by successful students (e.g., summarizing, questioning, predicting, etc.).
- Give high-needs students additional learning time for priority objectives whenever possible; students spend this time in interactive learning activities with teachers, aides, or peer tutors.

Other effective classroom management and instructional strategies:

- Efficient use of learning time
- Smooth and efficient classroom routines
- Clear standards for classroom behavior that are applied fairly and consistently
- Careful orientation of students to lessons
- Clear and focused instruction
- Routine use of student feedback and reinforcement for learning progress
- Review and reteach content, using different materials and examples to help all students master learning material.

Possible Indicators:

- High schoolwide and classroom expectations for student performance
- Positive school and classroom climate
- Strategies, approaches and programs for supporting high needs students within the school and classroom
- Commitment of resources
    1. Instructional materials and resources, in addition to textbooks, that support the curriculum and instruction
    2. Allocated resource budget by grade level/content area/themes
- Standards of authentic instruction (quality of instruction):
    3. higher-order thinking skills
    4. depth of knowledge
    5. connectedness to the world beyond the classroom
    6. substantive conversation
    7. social support for student achievement
- Curriculum integration - sample integrated, thematic units with accompanying learning activities such as projects, student grouping, etc. and student assessments

Guiding Questions in Using Information from Indicators:

1. Are school and classroom expectations for students high and visible? Do teachers post expectations and criteria for success in their classrooms?
2. Is the classroom climate supportive of student achievement? Is the teacher warm and caring? Are classroom rules posted and consistently and fairly applied?

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3. What strategies or approaches are used to support high needs students? Is the achievement of high needs students compared to the student's own past performance? Is there at least one adult at school providing ongoing support? Do these students participate in cooperative learning or cross-age tutoring to develop supportive peer relationships? How are high needs students helped to develop an internal locus of control? Do teachers communicate with parents or family members or other key people to encourage them to express high expectations and school achievement?
4. What financial commitment has the school made to other resources besides textbooks?
5. To what extent is authentic instruction observable in the classroom?
    - higher-order thinking - To what extent are students engaged in activities that require students to use high-order thinking skills such as when students combine facts and ideas in order to synthesize, generalize, explain, hypothesize or draw conclusions (activities that require students to manipulate information and ideas)?
    - depth of knowledge - To what extent do students deal with knowledge that concerns the central ideas of a topic of content area? During a lesson do students focus on a significant topic or demonstrate their understanding of the problematic nature of information and/or ideas; arrive at reasoned and supported conclusions, or explain how they solved a complex problem?
    - substantive conversation - To what extent do students engage in extended conversations with the teacher and/or peers about subject matter, promoting shared understanding?
    - connections to the world beyond the classroom - To what extent do students make connections between substantive knowledge and real world problems, issues, or personal experiences? To what extent do students communicate their knowledge to others outside the classroom, or use their knowledge to assist or influence others?

    (From Newmann, Fred M. et al. *Five Standards of Authentic Instruction*. Educational Leadership April 1993 p8-12)
6. To what extent do teachers integrate their curriculum with other content areas or integrate workplace readiness skills into their instruction? Do teachers have opportunities to plan together to encourage curriculum integration?

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14. Criteria: Student performance is assessed with multiple assessments.

What the Research Says: Effective schools closely monitor the progress of student learning. Procedures for collecting, summarizing, and reporting student achievement information are established and used. Periodic updates of individual student records are accomplished and group summaries developed and reviewed for trends. In addition, effective schools use aggregated and disaggregated student test results and other data such as attendance, grades, and other information to identify potential problems. Summaries of student performance are used to design changes in instructional programs and school procedures to meet identified needs. Because school climate has a powerful influence on academic performance, school climate is assessed as part of the assessment of student performance. Performance data on young children is collected and reviewed to ensure that those with learning difficulties are identified early and special services or treatment provided to help them. Schools encourage teachers to incorporate alternative assessment practices in their classroom. They arrange for professional development to build alternative assessment skills among the staff. Alternative assessment resources developed and used in other settings are collected and made available to the school's staff. School leaders work with staff to systematize methods for collecting and reporting information produced by alternative assessments. Periodic reports, summarizing overall student performance is provided to parents, families, and community members to keep them informed. Also, schools and teachers engage community support for increased use of alternative assessments, communicating that alternative assessments prepare students for life outside of school. Lastly, the schools' assessment instruments and methods, including alternative assessments, are reviewed for cultural, gender, and other possible biases and corrective actions taken as well as for alignment of assessment methods with curriculum and instruction. In curriculum reviews, data from periodic assessment reviews are used to inform the review process.

At the classroom level, teachers monitor student progress closely and regularly, both formally and informally, requiring that students be accountable for their academic work. Teachers are knowledgeable about assessment methodology and use this knowledge to select or develop valid, reliable assessments including alternative assessments. If not, teachers participate in professional development activities that prepare them to develop traditional and alternative assessments. Alternative assessment professional development includes activities that help teachers learn how to establish standards, develop rubrics or scoring guides, and design tasks. They carefully align their classroom assessments with the written curriculum and actual instruction. Assessments are reviewed for cultural, gender, and other biases, making needed changes. Routine classroom assessments are used to check student progress. These include conducting recitations, circulating and checking students' work, assigning and checking homework, conducting periodic reviews with students, administering tests and reviewing student performance data. Teachers make use of alternative assessments as well as traditional tests. In classrooms where students are engaged in performances such as individual/group projects, presentations, and products such as writing papers and displays, the use of alternative assessments to evaluate student progress or performance is more appropriate. Teachers plan alternative assessments as they plan instruction. They begin using alternative assessments on a small scale and recognize that the best assessments are developed over time with repeated use. Teachers collect alternative assessments used successfully by others and use or modify these for their own classrooms. Alternative assessments are developed that have instructional value as well as assessing student learning. Students are taught the scoring systems that will be used to evaluate their work and are allowed to practice using these systems for self- and peer assessment. Students are involved in peer assessment activities such as peer editing. Teachers developing alternative assessments get input from older students for establishing performance criteria. Both traditional and alternative assessment results are used not only to evaluate students and their progress but also to determine the effectiveness of their instructional practices to facilitate student learning, making modifications in instructional strategies as needed. At the lower grades, the results from monitoring efforts are reviewed to ensure early identification and referral of young g children with learning difficulties. Finally teachers set grading scales and student standards high to promote excellence, and they encourage parents to keep track of student progress

Sample Alternative Assessment Practices and Criteria:

Within schools, the use of different assessment practices and criteria to assess student performaces and products have been designed, developed, piloted, and implemented. To develop alternative assessments, teachers and schools need to have an understanding about how to establish student standards or criteria, to design approprate tasks that can elicit the type of performance that matches with the student standard, and to develop scoring rubrics or guides. Listed below are examples of criteria that teachers and states have developed to assess students.

Student Portfolio. A portfolio is a purposeful collection of student work that tells the story of a student's efforts, progress or achievement in a given area. The collection includes:

1. student participation in the selection of portfolio content
2. guidelines for selection
3. criteria for judging merit
4. evidence of student self-reflection

It is not a "student folder." Portfolios can have different purposes such as instructional, tracking student progress, grading, employability, parent conferences, celebration of student achievement, and curriculum evaluation. Guidelines about what goes into the portfolio can range from being highly structured to unstructured. Various kinds of categories and criteria for evaluating portfolios have been developed by schools such as:

1. Writing portfolio - the contents of the student's portfolio demonstrate:
    - accomplishment in writing
    - use of processes and resources for writing
    - development as a writer
2. Continua of descriptors (strong performance to needs improvement) used to assess a reading-writing portfolio in the areas of:
    - versatility
    - process
    - response
    - self-evaluations
    - individual pieces
    - problem solving
    - purposefulness/uses
3. Criteria for a math portfolio included
    - evidence of mathematical thinking
    - quality of activities and investigations
    - variety of approaches and investigations

Because the focus of curriculum and instruction and what a school believes is important for their students to learn varies from school to school, criteria for evaluating portfolios will also differ, reflecting the learning priorities that schools have for their students.

Student reflections on their work, progress or achievement are an important part of portfolios. Student self-reflections can be prompted by questions such as "Why did you pick the pieces of work you did?", "If you had to change this work, what would you do and why?" or they can write about their work in a letter to the teacher or think about their work as a topic for a writing sample. Different criteria for evaluating self-reflections have been developed. One set of criteria included:

1. Quality of metacognition or students thinking about their learning
    - Thoroughness of analysis - main points are synthesized across portfolio pieces; details from student writing samples in the portfolio are used to support their points
    - accuracy of analysis
    - self-revelation - student showed awareness of growth in their letter; had a goal for improvement
2. Quality of writing demonstrated in the self-reflection
    - organization
    - voice
    - conventions

For a math portfolio, one teacher used questions to stimulate student thinking and reflections about how they went about solving a mathematical problem. The questions used included:

1. About what percentage of time did you spend on each of the following problem solving steps? reading the problem, analyzing the problem (making sense of the problem, exploring possible solution strategies, and planning a strategy.
2. How many times did you engage in "self regulation" - asking yourself questions such as "How is it going?" "Am I understanding this?" "Should I reread the problem?" "Should I try a different strategy?" "What am I missing?"
3. How well did you communicate your solution? Would it be easy for someone else to understand your solution and the rationale for it?
4. What was the most difficult aspect of the problem for you?
5. Did you enjoy doing this problem? Why or why not?

Writing sample Writing samples are products that can be assessed by rating different aspects/traits/dimensions of a student's writing along a continuum. For example, the six trait model for assessing student writing uses the traits:

- ideas and content
- organization
- voice
- word choice
- sentence fluency
- conventions

Student writing samples are evaluated on each trait using a 5 point continuum. Each point on the continuum is defined by teacher and student descriptors as well as actual student writing samples to exemplified strong and weak performance. The traits are integrated into instruction by teaching each trait with students eventually evaluating their own and their peers' work.

Open-ended mathematical problems. Students' written responses to an open-ended math problem can be assessed by rating the written response on different traits instead of just evaluating the correctness of their answers. One example is the use of a five-point scale to assess the overall student response on:

1. mathematical reasoning - the ability to make selective judgments in determining one or more solutions to a given problem situation.
2. communication - mathematical vocabulary, language, notations, and symbols are used to describe or interpret mathematical concepts, procedures, and relationships.
3. problem solving - each problem solving process component is further assessed. Each of the following four traits are rated on a five point scale:
    - understanding the problem
    - choosing a problem solving strategy
    - implementing a problem solving strategy
    - finding and reporting a conclusion

(From Kansas State Assessment in Math)

Another example of a mathematics scoring guide for open-ended questions looks at three traits that are rated on a 4 point scale:

1. mathematical knowledge - knowledge of mathematical principles and concepts which result in a correct solution to a problem
2. strategic knowledge - identification of important elements of the problem and the use of models, diagrams and symbols to systematically represent and integrate concepts.
3. communication - written explanation and rationale for the solution process.

(From Illinois performance assessment in math)

To assess student performance on open-ended math problems, the following three standards of performance might be considered:

1. construction of knowledge: analysis in which the student demonstrates thinking with mathematical content by organizing, synthesizing, interpreting, hypothesizing, describing patterns, making models or simulations, constructing mathematical arguments or inventing procedures.
2. disciplined inquiry :
    - math concepts - an understanding of important mathematical ideas that go beyond application of algorithms and elaborating definitions; and making connections to other math concepts or making connections to other content areas
    - elaborated written communication - a demonstration of concise, logical, and well articulated explanation or argument that justifies the mathematical work

(From Newmann, Fred M. et al. *A Guide to Authentic Instruction and Assessment: Vision, Standards and Scoring*. 1995)

Cooperative group science projects. Using a five point scale for each category, cooperative group projects can be assessed on:

1. recognizing and defining the problem
2. designing the problem solving strategy
3. implementing the problem solving strategy
4. interpreting and communicating findings and conclusions

(From Kansas State Assessment in Math)

Projects and presentations. At a technical high school in New York, Grade 11 students in applied physics participate in team projects that culminate in oral presentations. Emphasizing thinking skills and communications, the teacher assesses student performance on their science projects on the following criteria:

1. Thinking skills including:
    - understanding - understanding the relationships, locating information to solve the problem, and explaining known principles
    - critical thinking/meta-processing - identifying the problem, justifying decisions, making observations, inferences, and responding to unanticipated problems.
    - extensions of knowledge and inquiry/creativity - asking informed questions, going beyond what was required, and putting work in a larger context or relating work to real-life
2. Communication/presentation skills including:
    - clarity and coherence of presentation - uses visual aids, explains calculations, uses clear and concise language, organizes materials systematically, uses conventions that make student's train of thought evident
    - presentation aesthetics - body language and poise, eye contact, confident with ownership of materials, smooth delivery
    - multimedia presentations - puts components or product together well, uses appropriate medium or materials to convey ideas, and pays attention to details

(From Bank Street College of Education, New York)

Speaking skills or oral presentations can be assessed by applying a four point rating scale to each of the following criteria:

1. content - specific things that are said
2. delivery - the transmission of the message, focusing on the volume, rate, and articulation
3. organization - how the content of the message is structured, emphasizing the sequence and relationship among the ideas in the message
4. language - the language used to convey the message is concerned with grammar and choice of words

(From the Massachusetts Department of Education Assessment of Basic Skills, Speaking Assessment Rating Guide)

Possible Indicators:

1. Professional development focusing on assessment
2. School profiles of student achievement disaggregated by grade level, gender, and ethnic group
3. Matching of curriculum, instruction, and assessment
4. Consistency and continuity of alternative assessment scoring guides within and across grade levels (i.e. if a school is using the six trait model for assessing writing, then the model is used consistently among classes within a grade level and across grade levels)
5. Quality of classroom assessments
6. Clear target
7. Important target
8. Purpose for assessment
9. Target and method match
10. Sources of mismeasurement identified and changes made
11. Integration of assessment and instruction

Guiding Questions in Using Information from Indicators:

A. Do school leaders and teachers have a good understanding and knowledge of assessment methodology and use this knowledge to develop valid, reliable assessments including alternative assessments? Do teachers know how to develop alternative assessments, how to establish standards, and how to develop scoring guides and to design performance tasks? If not, has staff development been conducted or planned regarding classroom assessment and alternative assessments specifically?

B. To what extent is classroom assessment of high quality?
   - Can teachers clearly describe the targets or student outcomes they are trying to assess? Overall do they know what they hope to accomplish with students during the year? In general, what are the teachers' targets or outcomes for their students? Can students use precise and common terminology to describe the quality of their work? Can students articulate the criteria for their success? Can students explain what the teacher expects them to learn? Does the teachers show their students pieces of work that illustrates the skill being assessed?
   - Can teachers state why the student outcomes or targets are the most important ones they want to emphasize? Can they pick the outcomes that their assessments are measuring? Can students explain how the work they are doing is applicable to the rest of their lives? Does the teacher have test blueprints indicating the relative importance of the various outcomes in a lesson or unit and does the assessment instrument reflect these priorities?
   - What are teachers' purposes for assessing students? Do students use the information to track their progress and to identify areas they need to work on? Do teachers use the information to guide their instruction and to change their instruction to better meet student needs?
   - What is the range of assessment methods used in the classroom? In general, how do these methods match up to different kinds of student learning outcomes? Why do teachers select the assessment methods that they do? What assessment methods do each target or student outcome and purpose suggest as appropriate?
   - Do teachers understand the pitfalls of measurement and develop assessment instruments to minimize these? Do they know what can go wrong, given the target, purpose, and method and do they know how to prevent mismeasurement? Do students think that their grades reflect what they can do? Do students think that the teacher's tests/assessments allow them to show what they are able to do?

C. Have multiple assessment approaches been developed to assess student learning for each standard?

D. To what extent is instruction and assessment integrated? How does the assessment task help students? How do the results from assessments affect what happens next in instruction? Do teachers use the information from previous assessments to alter what they do in future instruction? How and when do teachers give specific feedback to students?

Citations:

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15. Criteria: Effective schools promote mutual respect, understanding, and appreciation for diversity among students, teachers, administrators, families, and community members of different socio-economic status (SES) and cultural backgrounds by embracing the key concepts of equity to help them eliminate bias and discrimination in the context of day-to-day activities.

What the Research Says: Educational equity means more than the provision of equal access to facilities, courses, and programs regardless of national origin, race, or gender. It also means meeting the diverse educational needs of students who need specific skills that will enable them to access courses and opportunities. Misconceptions and beliefs about equity have tended to slow the progress to educational equity. For example, some people think that equity has already been achieved or it is an impossible goal or it is time consuming. Research shows that equity has not been attained. Even when the assignment of students has produced racial/ethnic balance in schools across a district, there still exists serious problems of discrimination, equity, and fairness that are found at the school and classroom levels. What does happen to minority students within a school or classroom? The current desegregation efforts focus on with-in school integration. The impact of ability grouping and tracking is becoming a major area in desegregation planning. These practices usually result in communicating different expectations of students based on their cultural group, race, gender, and other factors unrelated to students' learning abilities.

By embracing the key concepts of equity, it is possible to eliminate the bias and discrimination in schools' day-to-day activities.

1. ***Policy.*** The district/school policy underlies all efforts to attain educational equity. Policy that directly addresses equity shows teachers, principals, students, parents, families, and the community the priority of and support for equity efforts.
2. ***Language.*** A crucial first step is a strong policy that biased and derogatory language will not be tolerated. All members of the school community need to become conscious of language that demeans and excludes individuals and groups. The use of language is a powerful factor in the development of attitudes.
3. ***Materials.*** Review of the content, illustrations, and language in current school materials is necessary to assure freedom from gender, racial, and ethnic biases and stereotyping.
4. ***Attitude.*** Schools can take measures that all students, staff, parents, and families are treated with respect and positive personal regard.
5. ***Interactions.*** Schools can take actions to break old, often unintended and unfair ways of interacting with staff, students, parents, and families through awareness building, cross-cultural training and commitment.

Effective schools provide multicultural education activities as an integral part of school life, involving all students not just those students belonging to minority cultural groups. Multicultural activities are integrated into the curriculum and not offered as "one shot" or culture-of-the-month sessions. They become the norm from the beginning of children's educational experience.

Schools work to achieve equity in learning opportunities and outcomes by making equitable distribution of achievement and other outcomes a clearly stated and pursued school goal. Achievement and behavioral data are disaggregated to obtain a clear understanding of how different groups of students are performing and gather information on ways to meet the needs of underserved groups.

Effective Approaches to Promote Intercultural Harmony:

Overall - Most Beneficial Approaches Are	*Effective Instructional Practices That Enhance Multicultural Relations, Interactions, and Attitudes*	*Ineffective and Detrimental Practices*
• When all children are involved When they are in depth, long-term, and infused into the overall curriculum • When children are introduced to multicultural activities as young as possible • When teachers have the attitudes, training, materials, and support needed to deliver high-quality multicultural educational activities	*Contact among different cultural groups*: Contact can reduce bias and promote positive relations only under certain conditions. Students have: • equal status in a situation; • opportunity to get to know one another as individuals; • common interests and similar characteristics such as age; • social norms favorable between the two groups, especially when standards are set by leaders • circumstances favoring cooperation • opportunity to advance individual or group goals through cross-cultural interaction *Cooperative learning* in which there is • positive interdependence (i.e., students perceive they need each other in order to complete the group's task) • accountability individual - student performance frequently assessed • group processing - groups discuss how well they are achieving their goals • interpersonal and small group skills that have been taught by the teacher • face to face promotive interaction - students promote each other's learning by helping, sharing, and encouraging one another's efforts to learn. *Prejudice reduction and empathy development* that include: • Presentations that dramatize the unfairness of prejudice and the harm it does • Books and other print materials that portray cultural groups in a positive light • Initial focus on one's own culture • Role-taking and simulation games • Counterstereotyping *Critical thinking development* - thinking skills that enhance intergroup relations include intellectual curiosity, objectivity, open-mindedness, flexibility, intellectual skepticism, intellectual honesty; being systematic, decisiveness, and respect for other viewpoints *Activities aimed at building student self-esteem* including teacher warmth and encouragement, experiencing academic success; working closely with people who have physical or mental handicaps, activities portraying people of one's cultural group or gender in a positive light; and having teachers and administrators of one's cultural group in one's school.	• "Message" films and plays that propagate a set of beliefs and values • Human relations training and direct anti-prejudice lessons • Low expectations as expressed in differential treatment of students on the basis of culture • Academic tracking

Possible Indicators:

To gain the necessary information on equity in your school, indicators should be broken down (disaggregated) by race, ethnic group, and gender for each grade level if possible. By reviewing information in this format, schools are provided with a more complete picture on the extent that there is under-representation or over-representation of students based on these factors. This objective information can give all staff, parents, families, and the community a better picture of equity with-in their schools, thus giving a foundation for identifying and addressing equity issues.

Possible Indicators:

1. School attendance
2. Differences in levels of curriculum and instruction for low income and/or minority students
3. Grade retention
4. Grade distributions
5. Graduation rates
6. Students use of technology and their participation in "high stakes" computer activities
7. Student assessment information including performance-based assessments such as writing samples, portfolios, projects and traditional assessment (i.e., standardized tests)
8. Graduates in post secondary education and training
9. Instructional group assignments, course, and class enrollment
10. Enrollment in different school programs such as special education, Title 1, accelerated programs, etc.
11. Parent, family, and community participation in school planning and in activities
12. Student participation in extracurricular activities

Guiding Questions in Using Information from Indicators:

For **each** of the above indicators,

A. Is any group disproportionately represented in your opinion? For example, are there more minority absences than non-minority absences - greater percentage or proportion of minority students absent.
B. When compared to district data, school data, or grade level data, is the distribution of percentages or proportions for various groups (minority, gender, disabled-not disabled) very different?
C. Is the gap between the different groups widening or is it narrowing? A narrowing gap would be a positive sign while a widening gap would indicate a potential problem area.
D. Is/are there any grade level(s) at which groups are more disproportionately represented on the different indicators?
E. Are different groups achieving competency according to state content standards disproportionately? For example, a smaller percentage of girls than boys are achieving competency in science.
F. Within special programs, are different groups of students achieving equally? For example, are girls achieving as well as boys in the Title 1 program?
G. Across programs are different groups participating disproportionately? For example, a smaller percentage of minorities are involved in computer lab classes when compared to the school percentage of minorities or the grade level percentage.

Citations:

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16. Criteria: Effective schools provide programs and support to help high needs students achieve school success.

What the Research Says: Effective schools focus on prevention of learning problems rather than remediation for their high needs students. For pre-schoolers, prevention programs focus on exploration, language development, and play while kindergarten programs emphasize language and literacy development as well as other instruction appropriate for early grade students. In the elementary grades, effective prevention programs stress tutoring and/or small group instruction in reading. To promote student learning, teachers utilize validated methods such as cooperative learning and "continuous progress" in which intensive instruction is focused on identified learning needs.

Special programs and activities (e.g., Title 1, bilingual, migrant, special education, etc.) for high needs students are carefully coordinated with regular classroom activities and often include opportunities for extended learning. Across grades, special programs for high needs students tend to be intensive and comprehensive. The programs typically place students in small classes (22 or fewer), are individualized, and have a low student-teacher ratio. Planning coordinates programs and activities and is based on student's instructional needs. Instructional objectives are clearly communicated to students and activities are tied to the objectives. All teachers who work in the special program are highly skilled in and use a variety of instructional methods and techniques. Programs for high needs students incorporate proven approaches such as peer, cross-age, and volunteer tutoring and computer-assisted instruction. Students receive instruction in test-taking skills and are provided activities to reduce test-taking anxiety. For older high needs students, alternative learning arrangements such as "school-within-a-school" or off-campus activities that engage their special interests are provided by effective schools. There is frequent conferencing, monitoring and evaluation of student progress toward objectives. The programs tend to offer more counseling and support services than the "regular" school curriculum. High needs students are closely monitored and results are used to adapt instruction to students' individual needs. Grade level retention is avoided until all other alternatives have been explored. Pull-out programs are used judiciously. If they are used, schools assure that they are intensive, brief and designed to catch students up with their peers and quickly return the students to their regular classroom. Pull-out programs are not intended to support students long-term.

The principal and/or leadership team in the school reinforce that school is a place for learning and have high expectation for all students. They are not only active in guiding the school's instructional program but also take a strong interest in the operations of programs for high need students. They support and continue to modify special programs as ways to provide effective learning experiences for marginal students. The quality of the leadership is more important to program success than other factors.

Characteristics Associated with High Needs and At Risk Students:

Research has shown that it is possible to identify potential drop-outs as early as elementary school. There are a great variety of conditions associated with being at-risk, but the presence of certain characteristics have correlated with a high likelihood of students dropping out, including students:

- living in high-growth states
- living in unstable school districts
- being a member of a low-income family
- having low academic skills though not necessarily low intelligence
- having parents who are not high school graduates
- speaking English as a Second Language
- being single-parent children
- having negative self-perceptions; being bored or alienated; having low self-esteem
- pursuing alternatives: males tend to seek paid work as an alternative; females may leave to have children or get married

Effective Approaches and Practices:

No specific "cure" exists for supporting the learning of high needs students, but rather a variety of approaches and strategies have been implemented and shown effective. A few of the more prominent ones are presented in the following table:

Peer, Cross-Age, and Volunteer Tutoring	*Cooperative Learning*	*Computer-Assisted Instruction (CAI)*
Three of the most often cited benefits of tutoring are: the learning of academic skills, the development of social behaviors and classroom discipline, and the enhancement of peer relations. Research strongly supports the benefits to both tutors and tutees in elementary mathematics and language arts. Positive results were found for short-and long-term tutoring. Research on low-achieving and other high needs students as tutors has increased and has shown quite positive gains for low-achieving, LEP, learning disabled, behaviorally disordered and other at-risk student populations in the following areas: 1) academic achievement across grades and content areas, 2) locus of control, 3) self-esteem, 4) social skills, 5) attitude towards school, and 5) dropout rat, truancy, and tardiness. *Sample program.* The tutoring program at Lake Washington High School and Benjamin Rush Elementary School in Lake Washington SD, Washington tutoring program included these key elements: • Elective class for both tutors and tutees. • Staffing by content area teachers. • Student selection based on interest and willingness. • Focus on target classes. Each tutee identifies a "target" class that they need help. • Tutor-tutee pairs. Tutors and tutees are arranged in pairs or trios based on target class needs and ability to work together. • Training. At the beginning of each semester (or cycle) tutors and tutees receive training in study skills, learning strategies, organizational skills, mnemonic devices, time management, and other	In general, students benefit from cooperative learning structures. Some researchers have found that cooperative learning is more in keeping with cultural values of different ethnic groups than is individual competition. In addition to achievement benefits, cooperative learning has also enhanced students' self-esteem, sense of self-efficacy as learners, cross-racial and -ethnic friendships, incidences of helping behavior, and empathy for others. *Sample practice:* Cooperative learning was applied at Independence High School in San Jose, California, a large school consisting of 30 percent Hispanic, 30 percent Asian students, 30 percent white, and 10 percent black students. The major elements of their cooperative learning approach included: • Students are placed in heterogeneous learning groups of four or five. Groups are selected by the teacher to be diverse in terms of ability, gender, ethnicity, SES, and sometimes grade level. • There is often a focus on establishing positive interdependence among members of the group, a reason for working together (e.g., a single grade given to all members of the group based on the success of their cooperatively completing assigned work. • Individual accountability is established. While there is a responsibility to the group, individuals are responsible for learning the material. For example, if all students were to complete assignments together and receive the same grade for the group's work.	When used to supplement and complement teacher-directed instruction, computer-assisted instruction reinforces traditional instruction. Studies have shown that CAI used in this manner produces positive achievement results, including the use of word processors leading to better writing outcomes; higher learning rates than with conventional instruction alone; longer retention of content learned; and more positive attitudes. It has shown to be more beneficial for younger students, more effective with economically disadvantaged students, and more effective for teaching lower-cognitive material than higher-cognitive material. *Sample program.* At Pensacola High School in Pensacola, Florida in which over half of the students are from diverse cultural backgrounds and half qualify for free lunch, the CAI program was implemented in the late 1980's. For each learning area (i.e., reading, mathematics, language arts, spelling, and a pre-employment course in survival skills), individualized programs for each student are provided as the computer monitors each student's progress and • diagnoses the student's level of understanding a concept. • selects and generates exercises appropriate for each student. • analyzes all student responses. • gives appropriate confirmation, correction, error message, or hints.

Peer, Cross-Age, and Volunteer Tutoring (cont'd)	*Cooperative Learning (cont'd)*	*Computer-Assisted Instruction (cont'd)*
methods for learning how to learn. • Mini-lessons. The first 5-10 minutes of each peer tutoring class are devoted to reviewing learning strategies, tutoring methods, and other processes from the training. • Testing program. Students are periodically assessed on learning strategies, study skills, and other content presented in the training and ongoing mini-lessons. • Master note takers. Each regular class teacher designates a student to be "master note taker" for that subject on that day. The notes are made available in the peer tutoring room as a resource for students. • Recordkeeping. Records of student progress are kept on forms such as Daily Learning Goals, a Peer Tutoring Checklist, a Peer Tutoring Progress Report, and bimonthly discussions among tutors and teachers are conducted. • Planning/coordination activities. Meetings of peer tutoring staff members are held weekly. Communications with classroom teachers is frequent.	• Each student might also be given an additional grade based on individual performance on a final test. • There is an emphasis on the process of cooperative learning itself. At the beginning of the lesson, the teacher explains the steps in the process and monitors the process in the groups, intervening when necessary. At the end of the cooperative learning activity, the teacher debriefs the students.	• displays the student's results at the end of a session. • records the student's performance daily. It should be emphasized that the heart of the CAI program is the teacher-student interactions that take place in relation to the computer activities. Teachers accompany students to the computer lab, take note of students' daily progress, using the information to tailor learning activities to address areas of need in the regular classroom and praising student successes.

Possible Indicators:

1. School attendance
2. Dropout rates
3. Grade retention
4. Class size
5. Grade distributions
6. Graduation rates
7. Students use of technology and their participation in "high stakes" computer activities
8. Student assessment information including performance-based assessments such as writing samples, portfolios, projects and traditional assessment (i.e., standardized tests)
9. School improvement plan includes commitment of resources to support high needs students
10. Instructional group assignments, course, and class enrollment
11. Enrollment in different school programs such as special education, Title 1, accelerated programs, etc.
12. Parent, family, and community participation in school planning and in activities

13. Student participation in extracurricular activities
14. Positive school climate
15. Community collaboration

Guiding Questions in Using Information from Indicators:

A. Do kindergarten programs support parent involvement and feature exploration, language development, and prereading skills?
B. Are students at risk of dropping out identified ? How are they identified? What information is used for identification? Are students at risk of dropping out performing differently than other students on student assessments?
C. How are students identified for special programs and services such as Title 1, bilingual, etc.? What assessments are used for evaluation? Is there an objective approach in place? What opportunities do these students have for extended learning? If they are pulled out, is it used judiciously and for how long do they remain out of the regular classroom? How are these programs coordinated with the regular classroom?
D. What programs, approaches, or strategies does the school use to support high needs students? What strategies within the classroom?
E. Are validated, age appropriate approaches to learning (e.g. continuous progress, cooperative learning, peer, cross-age, and volunteer tutoring; and CAI) used?
F. Is retention in grade avoided until all other alternatives have been considered and found inadequate?
G. Do special programs for older students provide learning activities that have real-world applications, school-to-work, and/or community-based learning?
H. Is the school climate supportive of high needs students?
I. Do discrepancies exist between high needs students and regular students in terms of attendance, drop-out rates, grade retentions, graduation rates, use of technology, and participation in extracurricular activities? If so, what plans does the school have for addressing them?
J. What outreach activities does the school conduct to secure the participation of parents of high needs students in supporting their children? What parent programs are offered to show them ways that they can help their children?
K. What community outreach and collaboration does the school do to support high needs students?

Citations:

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17. Criteria: Effective schools provide non-English-speaking (NES) and limited-English-proficient (LEP) students with a strong academic core program that supports students' first language.

What the Research Says: Provision of quality academic instruction in NES and LEP students' first language does not interfere with or delay their acquisition of English language skills. In fact, substantial academic instruction in their first language enables these students to more quickly "catch up" to their English speaking peers in regular classrooms in English language, reading, and mathematics. Whenever possible, effective schools offer NES/LEP students instruction in their first language for their academic core courses in addition to intensive English as a Second Language (ESL). If this is not possible, these students are provided with first language materials and tutoring in their first language. LEP students are provided a combination of instruction in their first language and English. As students acquire better English language skills, more of their academic core instruction is provided in English. English language and first language proficiency is continuously assessed from the time of enrollment in the school. LEP students are provided with language support services for a minimum of about six years or until they are able to demonstrate English language skills necessary to function in English-only classrooms. Language support services in the form of tutoring programs have been shown to foster English language literacy. .

The academic core program for NES and LEP students is similar to the program for other students. Access to core curriculum is not delayed until NEP/LEP students have developed their English language skills. By delaying such access, schools exacerbate the skill differences between these students and English speaking students, requiring them to learn content material in shorter time periods. Within LEP program classes and regular classes students are grouped heterogeneously by ability and language so they can learn from one another. Finally, increased first language instruction makes it possible for language minority parents to support their child's learning and allow them opportunities to help their child in their own language.

Example of an Alaskan Elementary Immersion Program:

The Kindergarten Total Immersion Yup'ik program in Bethel exemplifies a potentially strong program for its Yup'ik LEP students. This day-long, total immersion program aims to develop readiness skills by providing instruction in personal information, language arts, mathematics, science, music, and art in the students first language, Yup'ik. It is guided by the four goals to: 1) develop functional proficiency in the Yup'ik language; children are able to communicate in Yup'ik on topics appropriate to their age level; 2) develop cross-cultural understanding; 3) achieve growth and mastery of subject content material of the regular school curriculum; and 4) develop English language skills on par with non-immersion students. This program reflects the current research and basic guidelines for effective instructional programs for LEP students, namely:

- In primary grades, LEP students receive almost all of their content instruction in their first language with a limited amount of formal instruction in English through some content based ESL instruction.
- In upper elementary grades, content based ESL instruction would increase and content instruction in student' first language would decrease as their English language skills increased.
- LEP students' parents and families are included and involved in their children's learning and education. Effective schools and teachers are aware that language minority parents often have a different view of time. They believe that all parents want to be a part of their child's education. When appropriate, communications with parents and families are in their language. If parents cannot read and/or write, alternative ways of communications are found such as phone calls in their language, taped recorded messages, or home visits. If parents can read, school letters are translated into parents' language. Parents and families are encouraged to read and talk to their children in their own language and are shown ways to help their child's education at home. Viewed as a cultural resource, parents and families are invited to the school and the classroom frequently to discuss their culture.

Effective Approaches:

Effective Practices that Facilitate Language Learning	*Effective Practices that Facilitate Language Learning*
Students often progress through a series of natural language acquisition stages. Teachers can facilitate development within each stage and progression to the next stage by engaging students in appropriate activities for their stage of development. ***Stage 1: Comprehension*** • Do not force production (speech). Students will begin to use English when they are ready. • Provide materials in the first language if students read their first language. • Use visuals such as pictures, objects, and gestures to aid comprehension. Modify your speech: speak more slowly, emphasize key words, simplify grammar and vocabulary, do not talk out of context, and do not speak more loudly. ***Stage 2: Early production*** of limited number of words and phrases in English. Use question techniques such as yes/no questions, choice questions, questions which can be answered with a single word, and open sentence with a pause for a response (Pete is wearing blue pants, but Lisa is wearing __ pants.) • Do not overtly correct student errors but use subtle forms of modeling illustrated by the following: *Student*: I goed to the store last night. *Teacher*: Oh, you went to the store. What did you buy? • Expand student responses when possible. • Have students keep dialog journals. • Use share reading. ***Stage 3: Speech emergence*** in which quantity and quality of speech production is improved. Students need to be encouraged to use oral and written language. • Involve students in activities that encourage them to compare/contrast, sequence, and problem solve with charts, graphs, tables, maps, and other visuals. • Use skits and role plays to contextualize situations for students. • Play games. • Use the Language Experience Approach to encourage reading and writing. • Use semantic mapping to develop vocabulary. ***Stage 4: Intermediate fluency*** in which students are orally quite fluent. Although students oral skills may be very well developed, academic skills and reading and writing skills may lag behind. Students often learn language that is social in context quickly within one to two years. Academic language that uses more complex structures and is	not context based is more demanding and requires from 5-7 years to learn. This amount of time can be reduced if students have a firm foundation in their first language. Activities that encourage both content-area development and language development are very helpful at this stage. ***Stage 5: Fluency:*** Students are comfortable and fluent in language both for social purposes and academic purposes. Some activities for developing communications skills for social contexts include: • Use songs and games to teach vocabulary. • Have students start a picture dictionary or index file using magazine, newspaper, and catalog pictures. • Read prose, poetry, and rhymes aloud to students. • Provide the student opportunities to teach the class portions of their first language. • Label objects in the classroom in both English and students' first language. Use sentence labels. • Use calendar to teach days of the week, months, etc., and to introduce past, present, and future. • After developing basic listening/speaking vocabulary, recognizing words by sight, and being able to form the sounds in English as well as recognize their written form, students may start in a basal reader. Activities that help develop academic language proficiency in content areas include: • Use pictures to illustrate new words and terms. • Use concrete examples to help students understand concepts as well as maps, tables, globes, and models to reinforce concepts. • Incorporate field trips, speakers, experiments, and videos to provide the necessary background for comprehending concepts. • Write instructions using shorter and less complex sentences. • Encourage students to write by writing in cartoon "balloons" blanks. • Read historical comic books that discuss historical and cultural events. • Have students develop and use timelines to represent the relationship between events and time. • Read biographies of culturally diverse people. • Ask questions that require higher order thinking skills. • Tape record stories and word problems for independent listening assignments.

Important Facts from Research for Regular Classroom Educators:

The research also provides some important information that can help regular classroom teachers to understand their LEP students and assist their learning such as:

- When LEP students are not forced to begin speaking their new language immediately, they typically go through a silent period that lasts from a few weeks to several months.
- The most beneficial language environment is one where language is used naturally for communications.
- Memorized dialogues and mechanical drills appear to do little to encourage the development of fluent conversational skills.
- The first hurdles to new language are internal ones posed by students' emotional states. There is a filtering process called the "Affective Filter" that acts to control entry to further mental processing.
- There is a kind of self-editing or monitoring process in language learners that make them concerned about linguistic appearances. Students who are self-conscious use this filter more than students who are less self-conscious and have a high desire to communicate.
- Correcting students' grammatical errors at all times seems to produce little improvement. Every error does not need to be brought to the students' attention.
- Neurolinguistic research suggests that people who know more than one language make use of more of their brain than monolinguals.
- Psycholinguistic research suggests that people who control more than one language are verbally more skillful than monolinguals.

Possible Indicators:

When reviewing information on indicators, the information should be broken down into students currently in LEP programs and exited LEP students. Possible indicators include:

1. School attendance
2. Grade retention
3. Grade distributions
4. Graduation rates
5. Drop-out rates
6. Procedures for identification and selection of students to special education
7. Regular classroom participation during and after exiting LEP program
8. Students use of technology and their participation in "high stakes" computer activities
9. Student assessment information including performance-based assessments such as writing samples, portfolios, and projects; traditional assessments (i.e., standardized tests), and English language proficiency
10. Training of LEP program staff
11. Instructional group assignments, course, and class enrollment
12. Enrollment in programs such as special education, and Title 1 and length of assignment
13. Parent, family, and community participation
14. Student participation in extracurricular activities

Guiding Questions in Using Information from Indicators:

A. Are attendance rates, drop-out rates, graduation rates, low grades, and referrals to special education for LEP students disproportionately high? Are they disproportionately high when compared to non-LEP students?
B. What are the criteria for special education referral? Is there an over or under referral for LEP students?
C. Is a disproportionate number of LEP students scoring low on performance assessments or not achieving proficiency on state content standards? In other words, to what extent are LEP students achieving proficiency or success on alternative and traditional assessments?
D. Is a disproportionate number of LEP students using computer technology or participating in extracurricular activities?
E. Are LEP exited students participating in classroom activities or are they isolated within the classroom? Are they grouped together for learning or are they heterogeneously grouped with other students?
F. What are the qualifications of and training received by the staff of the school's LEP program?

Citations:

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SCHOOL/FAMILY/COMMUNITY PARTNERSHIPS AND COLLABORATION

18. Criteria: Effective schools establish partnerships with their constituents (parents, families, businesses, and other community members) and work to create various types of involvement that promote a variety of opportunities for the school, families, and community to work together.

What the Research Says: The research overwhelmingly demonstrates that parent and family involvement in children's learning is positively related to achievement. Parent and family involvement also has positive effects on student attitudes and social behavior. The most effective forms of parent involvement engage parents in working directly with their children on learning activities in the home. These benefits are enhanced when parents are even more actively involved in activities that support the instructional program by attending school activities, or volunteering in the classroom and on field trips. The earlier in a child's school experience the parent involvement begins, the more powerful the effect will be. Parent and family involvement supports student's learning, behavior, and attitudes regardless of factors such as parents' income, educational level, and whether or not parents are employed.

In addition to improved student outcomes, school communities benefit in other ways from increased involvement. Parent volunteers have improved self-concepts and greater appreciation of their ability to make a difference. Parents and the community are more likely to support the school with their labor and resources during fundraising or special projects. Increased parent and community involvement has a positive impact on school staff. School personnel benefit from improved rapport with families and community members and organizations. School-parent-family-community involvement needs to intentionally develop partnerships that serve students at all grade levels, build positive lines of communication, welcome participation by a spectrum of constituents, and continuously aim to improve the effectiveness of the partnerships.

Parents and families generally want to be good partners in their children's education. They need direction to participate in their child's learning with maximum effectiveness. Parent and family training may take various forms such as instruction sheets sent home, training sessions, handbooks, topical or make-and-take workshops. Researchers have found that a little parent training is better than a lot. Schools with extensive parent training components do not necessarily produce higher student achievement than those with only basic training. Schools with the most successful parent, family and community involvement programs offer a variety of ways that parents can participate. Effective programs offer parents several different options for their involvement, e.g., tutoring their children at home, assisting in classrooms, or participating in parent-teacher conferences. Successful programs also offer a range of volunteer options regarding time commitment (amount as well as time of day and year.) Special efforts are made to involve the parents and families of disadvantaged, racial minority, and language minority students, who are often underrepresented among parents involved in the schools.

Effective involvement also engages parents and community members in decision-making regarding school governance and school improvement efforts. Parents and community members participate in school-based management teams or parent-teacher associations which are broadly representative of the school community. These decision-making teams have the support of the district to make school-level decisions and function as a true decisionmaking body rather than only an advisory one. Continually striving to improve instructional effectiveness, school-parent-community leaders undertake school restructuring efforts as needed to attain agreed-upon goals for students. Research shows that schools benefit from parent and community involvement in governance in ways such as: 1) clearer understanding of parent and school motives/attitudes and 2) increased parent skills and ability to advocate for schools throughout the community.

Communication is a crucial component to successful parent and family involvement. Procedures and opportunities for involvement are clearly and consistently communicated to parents in effective school-volunteer programs. In these schools, communication repeatedly reminds parents that their involvement can greatly enhance their children's school performance, regardless of their own level of education or experience. Teachers/schools establish and maintain regular, frequent, home-school communications. This includes a balance of information about student progress and positive accomplishments and calling attention to any areas of difficulty or concerns.

The sphere of volunteers in effective programs is enlarged to involve community members in schoolwide and classroom activities. Individual community members, community organizations/agencies, and businesses can give presentations, serve as information resources, provide integrated services, function as the audience for students' published writings, and host site visits. Successful community involvement programs conduct vigorous outreach activities—especially in culturally diverse school settings—to involve parent and community representatives from all cultural groups in the community. They involve social service agencies, business, industry, and labor in helping to identify important learning outcomes and in providing opportunities to apply school learning's in workplace settings.

An Example of Parent Involvement:

Spring Glen Elementary School is in a suburb of Seattle, WA. The K-6 school has 400 students from a wide range of socioeconomic levels. The school has an innovative curriculum which includes whole language instruction, teaching to various learning modalities, creative staff utilization (specialists teach "basic skills" in the mornings, specialty areas in the afternoon,) and broad use of heterogeneous cooperative learning groups. Over half of the parents at Spring Glen are involved in instructional and non-instructional school activities in a typical year. The Parent Partnership Program enables parents to participate in the school in a variety of ways. Among the opportunities are

- ***The annual all-school barbecue*** held at the beginning of the year welcomes families to school and provides an informal setting for school staff and families to interact
- ***The PTA Board*** is a 55 member leadership group with defined roles and responsibilities for each member.
- Two ***Parent Volunteer Facilitators*** oversee the volunteer activities within the school and coordinate with staff on needs and recruitment of volunteers
- ***The Parent Talent bank*** is a computerized talent back which facilitates matching parent skills, preferences for volunteer activities and availability with school needs
- ***Classroom Volunteers*** help out in a variety of ways within the classroom and **Field Trip monitors** accompany small groups of students on field activities
- ***Grade Level Newsletters*** are published K-6th grade. They include "ideas" sections on how parents can support their children's learning at home
- ***The RICH Program*** (Reading is a Cool Habit) is a parent-run reading program with models, supports, monitors, and rewards children's reading
- ***Weekly schoolwork packets*** are sent home for parents and children to review. Parents sign and return a form indicating they have reviewed the week's work

Parents are in close communication with teachers and are involved in a number of other volunteer activities. A parent may work in the library or in helping prepare classroom materials like cutting and pasting bulletin board cut-outs. Parents play such an important role in the daily life of the school that a parent lounge is set aside for them to plan, work, share, and store supplies for parent-sponsored activities.

Types of Parent and Community Involvement:

Even at schools such as Spring Glen in the above example, where high levels of parent involvement exist, the impact may be effectively increased by the creation of an action team with an allocated budget to guide and coordinate school, family, business and community partnerships. The action team works to promote activity in various types of involvement such as parenting, communicating, volunteering, learning at home, decision making, and business/community collaboration (Epstein, 1995.) The following table outlines six types of involvement that schools are using to increase the participation of parents, families and the community in their schools.

1. *Parenting*	2. *Communicating*	3. *Volunteering*
• Include the broader family circle in special day events e.g. Grandparents' Day, Family Day, Sibling Day. • Family Math or Family Science hands-on programs which meet weekly for several weeks to explore topics, solve problems together, and take materials home to work on. • Math/Language Arts Fair where parents and families can try activities, games, and challenges. • Parenting workshops on topics such as discipline, drug awareness, communicating with teens, or financing college costs. • Childcare arrangements available to enable parents with young children to volunteer. • G.E.D. and E.S.L classes supporting parent learning. • Family assistance in health and social services • School space is available for support groups such as AAA, Parent Without Partners, Abuse Prevention, etc.	• School Parent Handbook with information on school mission, expectations, schedules, calendar, attendance, etc. • Beginning and year-end teacher letters addressing goals, expectations, grading, helpful hints, and thank-you's • Frequent School Newsletter (at least once/month) • Regular grade-level or classroom newsletter with current update on class projects, events, and needs. • Parent surveys through newsletter or homework. • Parent phone interviews • Feedback forms on school events e.g. Back to School Night, Parent Conferences. • Parent Hot-line or Message Board • Home visits conducted in conjunction with conferences, as a welcome to new families, to facilitate loan of school equipment (computer or video camera for a special project), or to discuss specific topic/problems.	• Volunteer coordinator facilitates communication, placement, match of skills and classroom needs, training, record keeping, evaluation and recognition. • Volunteer handbook/video • A parent-community database maintains a current list of skills, hobbies, experiences of community members. • Volunteer phone tree contacts every parent/family to identify how they would like to help out at school. • Senior centers connect "grandpeople" with schools/classrooms to help in workrooms, listen to children read/read to children, share hobbies. • High School Growth and Development Class provides childcare for parent volunteers with young children

4. *Learning at Home*	5. *Decision Making*
• Home Learning Calendars provide daily suggested activities for families to do at home. • Weekly TV-Free night, share alternatives • TV related learning activities e.g. cataloguing commercials during various shows, viewing logs, recording incidents of violence/caring depicted • Weekly parent interviews or discussion activities conducted by students on health, topical issues/current events. • Newspaper activities • Beginning reader "Book Bags" with books to share and related activities (e.g. Curious George and Bookmark) • Family computer program checkout	• Parent organizations (PTO, PTA) develop involvement and parent leadership • School Advisory Council takes up issues of concern brought up by Parent Association by conducting research, collecting parent opinion, and making recommendations on issues. • School-based Management Teams share decisions regarding budget, staffing, and curriculum with administrators. • Coordinating Councils coordinate, collect, and distribute information on service delivery agencies • Steering/policy committees on special programs such as TAG, special education, ESL, • District taskforces on AIDS curriculum, drug and alcohol awareness, curriculum or textbook adoption

6. *Business/Community Collaboration*
• Partnerships with pre-school or elderly care facilities where partners occasionally share activities such as story-telling, singing, gardening, or holiday activities. • Local artists, authors, businesses, and/or community support services give presentations or assemblies • Scholarships from local businesses/industry • Heart Association sponsors Jog-a-thon or Jump Rope for Heart events • Committees formed to organize events such as an annual School Field Day, Multicultural Week. • Task forces on topics related to children such as: summer or after-school programs, high school parking, teen center activities • Business-School partnerships which link schools with businesses or support service institutions. • Community partnerships with groups such as civic, cultural, fraternal, professional, and neighborhood which work together on specific projects. For example: - Lions Club sponsors a 1st grade unit on the American Flag, providing funding for instructional materials, resource people, and small flags for each students. - Native American Arts Council brings Indian art collection to school and facilitates related hands-on art projects • Industry-sponsored week-long programs with lectures, seminars and simulated business situations. • Integrated Services programs. For example, the *San Jose (CA) Success Team Schools* provides three elementary and two middle schools services for children and families. The program coordinates services in counseling, health, parent education, and help for children to achieve academically • After-school community programs with organizations like the *YMCA* which provide tutoring, homework help sessions, enrichment programs, sports leagues, or big-brother- big-sister connections • Local Hispanic organizations work together with district to address opportunities for youth employment, workplace training, development of businesses that will provide jobs. Collaborative may obtain grants for job training, scholarships, paid internships as well as locate sites for job shadowing, or after-school and summer employment.

Example of Business/Community Partnership:

The Business Education Compact (BEC) housed at Tektronix in Beaverton, Oregon facilitates partnerships between business and education leaders. The compact aims to 1) promote student excellence in math and science education and careers in science, engineering, and the technical fields, particularly for young women and minorities, 2) strengthen connections between the world of education and work as well as the classroom and the workplace, and 3) reinforce lifelong learning by reducing barriers to education. The organization is a source for contacts and resources in the business community. The BCE sponsors activities such as high-technology business site tours which encourage women and minorities to pursue careers in the field, structured workplace opportunities for students that are tailored by businesses to apply math/science skills, and learning opportunities for educators like onsite summer business placements to learn about careers and required job skills. The compact has been active in the development of a Work-based Learning Manual which assists employers with school-to-work transitions and in obtaining grants.

Possible Indicators:

1. Parent/community involvement is continually monitored and evaluated by activities and number of volunteers.
2. Written policies which emphasize the importance of parent involvement and provide ongoing support to parent involvement efforts.
3. Various avenues of communication (handbooks, newsletters, classroom updates, phone, conferences) used by the school
4. Programs available to cultural minority parents and community members to help children cope with any differences in norms noted between the home and the school
5. Parent surveys or interviews and results are provided to parents and community members periodically
6. Education, health and social service agencies meet and coordinate services
7. Education, health and social service agencies' policies and practices to actively involve families
8. Extensions of learning that go beyond school walls
9. Documentation of parent and family involvement in decision making
10. Community partnerships support learning in the context of the school, community and home
11. Action plan for continued development and evaluation of partnerships

Guiding Questions in Using Information from Indicators:

A. How are families involved with the school as partners in the development of their children?
B. Do policies and practices respect the culture of all children and families?
C. How involved are primary stakeholders in decision making and collaborative responsibilities?
D. Is there a variety of opportunities for schools, families and the community to meet the needs of children?
E. Are families effectively connected with coordinated services?
F. Are all key players (educational institutions, social service agencies, health organizations, juvenile justice, etc.)involved in school partnerships?
G. Do education, community, and social service agencies regularly exchange information about programs, events, initiatives?
H. Which families are not being reached by current partnerships? What steps are being taken to extend partnerships to these families?

Citations:

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SCHOOL/FAMILY/COMMUNITY PARTNERSHIPS AND COLLABORATION

19. Criteria: Effective schools collaborate with agencies, businesses, and the community to support special programs for high needs students and families.

What the Research Says: Schools with effective programs for high needs students use time, personnel, financial and other resources to support their priority goals. While many students and families with high needs might not qualify for "special programs," they do need intensive help in learning and/or social services. To optimize the benefits of various specialists and create a more inclusive school, effective programs for high needs students are integral components of the broader school and community. They are family-centered, display broad community involvement, emphasize high-quality educational and social services, and carefully evaluate children and family needs.

The primary characteristic of successful programs for "at-risk" youth or dropout prone students has a strong, often intense, level of commitment on the part of the instructional staff. Teachers have a high degree of support from parents, collaborating organizations, administration and peers. Traditional roles and role relationships may be blurred, while emphasis is placed on taking action to achieve school/program goals. There is a clear belief on the part of all staff involved, that they can teach virtually all students and that their students will succeed. Strong leadership is consistently mentioned in evaluation of programs for high needs students as crucial to program success. For older high needs students, alternative learning arrangements such as "school-within-a-school" or off-campus activities that engage their special interests are provided. Flexible programming or scheduling is provided for students who are parents or are working during school hours. In addition, programs for high needs students incorporate proven approaches such as peer, cross-age, and volunteer tutoring and computer-assisted instruction. Drop-out prevention programs often are successfully housed in locations outside the school. These programs go beyond basic skills or vocational/technical education. Effective programs pool resources to provide young people with experiences of success. These experiences are thought to counteract the messages of failure many high needs students have constantly received. Some research indicates that providing experiential activities that are challenging and develop abstract thinking and social skills, are essential to programs for marginal students. Effective programs may have a strong vocational component in conjunction with incorporating community-based learning and school-to-work transitions by establishing partnerships with businesses and community organizations.

To prevent tobacco, alcohol, and drug use among students, effective schools use validated practices that begin with prevention activities in the primary grades and continue them through high school. The focus of programs at the elementary level is on promoting positive self-regard and making healthy choices. As children get older, the program starts including drug- specific activities and providing activities that go beyond giving information to changing attitudes and behavior. While accurate drug-related information is provided, an effective substance abuse prevention program uses multiple strategies to promote positive general health skills, "refusal skills," understanding and resistance to media pressure, and positive alternatives to drug use. Peer-led activities are incorporated into the program as well as "booster" sessions that offer opportunities to recap major points, discuss ideas, and role-play after initial instruction. Instruction also focuses on short-term, personally meaningful consequences of substance use - loss of driver's license, bad breath from smoking - than on long-term health risks and avoids "scare tactics" that are known to be an ineffective practice. For those students who are recovering substance abusers, effective programs provide aftercare support for students returning from alcohol and drug treatments or are participating in smoking cessation programs. Finally, the school sets and enforces clear policies regarding drug possession, use, or sale. The support of families and the community is enlisted in designing and reinforcing the school's prevention program as well as collaborating with community agencies to provide drug-free activities for students.

For families and students with urgent health and/or social service needs, school leaders and staff collaborate with community agencies to provide the support that they need. Before collaboration, schools learn about the array of medical and social services providers in the community, how to access these services, and about different models of collaboration for needy families that have been implemented in other settings. Then, schools work with these agencies to coordinate a delivery system of services that includes prevention and intervention activities. Effective programs identify needy children and families early in the children's school experience and assist them with accessing appropriate health and social service facilities and providers in the community.

Effective Practices, Approaches, and Programs:

Partnerships with schools, agencies, businesses and the community become increasingly more effective on student achievement and behavior as the partnerships become more intensive. Partnerships range from cooperative arrangements or coordinated efforts to collaborative partnerships where professionals who teach and support programs for children and families, work together as a team. Cooperative, coordinated and collaborative partnerships are briefly distinguished in the following table

Cooperation:	*Coordinated Efforts:*	*Collaboration:*
• Short-term, informal, low risk	• Longer-term, more formal, shared resources and rewards	• Long-term, full commitment
• No defined mission or planning	• Focus on specific task or program	• Separate organizations restructure around common goal offering an array of services or programs
• Organizations retain autonomy	• Coordination requires planning, division of labor, open communication, balance of power	• Comprehensive and intensive sharing of resources, power, decision-making, and rewards
• Information provided as needed	• Communication channels are established	• Requires extensive planning, communication, risk
• Resources are separate	• Resources are recognized and may be used in other partnerships	• Foundations and community and federal agencies may provide funding and in-kind services

One successful collaborative approach to supporting programs for high needs students is the school-linked services (SLS) model. The school becomes the "hub" for a spectrum of student and family-oriented social services. The school acts as the focal point for making services such as health care, counseling, drug and alcohol prevention, or public financial assistance available to students and families on-site. Rather than needing to seek out offices of various agencies around the community, the school acts as a direct link between families and services. SLS's employ creative and flexible use of funds from federal programs such as Medicaid, Aid to Families with Dependent Children, Migrant Health Centers, Vocational Rehabilitation, Juvenile Programs in Institutions and Communities, the Early and Periodic Screening, Diagnosis and Treatment program, Title IV, Family Support Act, or community-based church, fraternal, philanthropic, linguistic or parent associations. The SLS facility is open long hours and may provide families with links to a spectrum of services and opportunities.

Possible Services Offered by a SLS:

- Early childhood programs
- Interpreter services
- Parent/adult education such as classes on:
  - Pre-natal Care/Infant Care/Toddler Support/Discipline/Talking with Teens
  - Improving the effectiveness of the home as a learning environment
  - Substance abuse prevention
  - English as a second language
  - Community College classes
- After-school recreation programs supported by community agencies and businesses
- Assistance from social welfare offices
- Health facilities including some administration of medications for specific health problems, counseling, and mental health
- Job-training opportunities, school-to-work transitions.
- Special interest clubs like YWCA, Boys and Girls Club, scouts, or youth choirs

An Example of a SLS Program:

A Student Linked Services center began at Hamilton School after up-front planning, study of needs, and buy-in from the community. Hamilton Elementary School is a K-5 school in San Diego's inner city. The 1300 students are of mixed ethnicity. Many do not speak English in their homes. The SLS effort includes the school district, San Diego Children's Hospital, San Diego Department of Social Services, the county Probation Authority, City Housing Commission, and San Diego Community College. The collaborative offers a range of services all on the school grounds and creative use of partners' funds.

All students register at the center (whether they need assistance or not.) No derogatory message is associated with obtaining services from the center. Intake staff assess obvious as well as "hidden" needs of families and children as part of the registration process. The center provides immunizations, physical exams, mental health care, public assistance, ESL and parenting classes. Teachers serve as resources for future or additional referrals and feedback on center services.

Characteristics of Successful Dropout Prevention Programs:

The primary characteristics of a successful program for at-risk students parallel those of an effective school: strong administrative leadership, high expectations, clear achievable goals, clear and consistent rules for discipline, effective instruction and classroom management, close monitoring of student progress, and emphasis that school is a place for learning. Characteristics of effective dropout prevention programs fall under five headings:

1. Organization/administration. Size and location of the program play a role in dropout prevention. Creating school-within-a-school is effective in countering high rates in large high schools. Other elements include administration of programs by agencies outside of schools; school-based management; focus on instructional leadership; fair discipline programs; community-based collaboration.
2. Overall positive school climate.
3. Service delivery/instruction. A common theme among successful prevention is that they are student-centered.
4. Instructional content/curriculum. A mix of academic instruction and experiential learning appears most beneficial. Successful instruction includes concentrated reading and writing activities, basic skills remediation, self-esteem building, and parenting skills. Learning content with real-world applications enhances students' interest and involvement. Links to the world of work in effective programs include goal setting, vocational skills, job training, work study, and career counseling.

Examples of specific programs and types:

- Adopt-A-Student Program in which businesses volunteer as mentors with low achieving high school students in a career oriented support system
- Project Coffee includes comprehensive vocational instruction, integration of academics and occupational training, job training and work experience, and a school-business and industry partnership.
- Programs that focus on the transition from middle school to high school that incorporate practices such as flexible scheduling, job development and placement for seniors, tutoring and mentoring, and incentives for those who show effort and achievement.
- Integrated services programs in which at risk students present multiple problems that call for comprehensive community-wide multi-service approaches.

Possible Indicators:

1. Process for identification of high needs students, continuous monitoring
2. Process for administrators and teachers to identify drop-out prone students and implement activities to keep them in school?
3. Number of families and students with health and/or social service needs and program that helps them
4. Data on tobacco, alcohol, and drug use among students and trends
5. Tracking of referrals, incidents of crisis intervention, absenteeism
6. School policy on tobacco, alcohol, and drug possession, use, and sale
7. Involvement of agencies, businesses, and community organizations with schools to support needy students and their families with health and/or social service needs
8. Partnerships focus on long-term collaboration, involving planning, assessment and clear communication
9. School improvement plan includes commitment of resources to support high needs students

Guiding Questions in Using Information from Indicators:

A. To what extent does the school actually work with community organizations and agencies to meet the needs of students and their families?
B. Do collaborative efforts: strive to include the breadth and depth of community involvement?
...have a clearly articulated common mission?
...have communication lines established, using a variety of channels?
...focus on prevention of learning problems rather than remediation?
...implement flexible programming and scheduling to accommodate students who are parents or who work during school hours?
...streamline intake and assessment systems?
B. Are high needs students and families identified in ways that will encourage participation in special programs?
C. What percentage of students are "at risk" of dropping out, young parents or to be young parents, and are working during school hours? How are their educational needs being met? At the elementary school level, are potential dropout prone students identified and monitored, providing services as needed? What percentage of the community has their high school diploma or GED? For those community members who do not, what adult education opportunities are provided by the school or community?
D. What percentage of young children are in need of health and/or social services? What percentage have their immunizations up-to-date?
E. Does the school have a clear policy on tobacco, alcohol, and drug possession, use and sale? Is the substance abuse prevention program implemented in the elementary grades and continue through high school? How effective is the program? Is data collected to inform the school about trends in substance use among students? is aftercare available for students returning from substance abuse treatments?
F. Is retention in grade avoided until all other alternatives have been considered and found inadequate
G. Are staff development opportunities available for increasing effectiveness of working with high needs students?

Citations:

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SCHOOL/FAMILY/COMMUNITY PARTNERSHIPS AND COLLABORATION

20. Effective schools promote community connections and cross-cultural communications with parents and families.

What the Emerging Research Says: Cultural understanding is molded in early childhood. Research studies show that children develop attitudes toward people by observing differences and similarities among people *and* internalizing spoken and unspoken messages about these differences. Family interactions communicate values and skills to young children that influence learning and cognitive development. Families, schools and communities can build a learning environment where cultural diversity is valued and celebrated. When students' home culture is honored and respected in the classroom, family and the community become natural partners in modeling, guiding and nurturing positive racial, ethnic and cultural attitudes and behavior. It is critical that administrators, teachers, parents and families actively model positive intercultural relationships.

Effective schools have strong, supportive leaders who understand the value of parent-community involvement. Inclusion of parents in school activities improves student behavior, attitudes, achievement, motivation and self-esteem. The exploration of cultural roots in school also improves students' self esteem and increases teachers' understanding and respect for minority cultures as well as awareness of teachers' own cultures. In studies of cultural heritage, community connections provide positive experiences for students with people from other cultures in the community. These experiences are critical to the formation of sensitive and supportive perceptions of others and to reducing prejudice. The school community benefits from activities in which people of different socioeconomic or cultural backgrounds have opportunities to interact. A parent coordinator or community outreach specialist plays a vital role in interfacing between community and school. To build cross-cultural communication, school personnel must actively reach out to the community. Minority groups need to feel supported for their successes and listened to. Parent and family involvement should be based on real needs or concerns of the community. Schools and the community should assess, develop and integrate, multicultural attitudes, knowledge and skills into the family-school-community learning environment.

Teachers with culturally relevant practices believe that all students can succeed. They have high self-esteem and appreciation for others. These teachers see themselves as part of the community and take time to know the community. Effective teachers in culturally diverse settings treat all children and their families with respect. They help students make connections between their community, national and global identities. They believe students come to school with knowledge which must be tapped for students to become achievers. Effective teachers in multicultural settings enable all students access to the "culture of power" (Delpit 1995). They validate and celebrate students' home language while developing skills in standard English to prepare them for success outside the community. Effective multicultural teaching builds on children's understanding and is based on in-depth knowledge of students and the subject matter.

Meaningful communications with parents and families enables teachers to understand the cultural frame of reference for various groups. Effective multicultural programs focus on actively building teacher awareness and understanding of cultural lifestyles, traditions, local heroes, and values. Both pre-service and in-service educators need in-depth, long-term experiential training to develop attitudes and skills needed to work with culturally diverse groups of parents and students. The amount of time spent learning about a group is directly proportional to a reduction in prejudice. Facts alone are not enough to reduce feelings of bias. Professional development can make teachers aware of cultural context and differences such as the way language is used in student homes as compared with rules of formal English used in schools. To understand key features of cultural groups, teachers need to probe - independently or as a staff -culturally dependent variables such as community norms, socialization and communication patterns as well as how cultures view authority (especially in the classroom), gender roles, or school/home responsibilities. Professional development activities should include strategies for including families in parent education, curricular activities, and community partnerships.

Communication is key to building cross-cultural trust and respect. Face-to-face communication is significantly more effective than notes sent home or school mailings. Many programs report that having bicultural and bilingual staff promotes trust and greater parent and family participation. When bilingual staff are not available, interpreters enable

teachers to meet with parents and families in person and communicate a respect for language/cultural differences. Announcements, invitations, school newsletters should be available in students' home language.

Effective Practices, Approaches, Programs:

Parent and Family Support	*Culturally Sensitive Curriculum*	*Family-Community Partnerships*
Parent-community-school planning groups identify meaningful opportunities to: • inform parents about the importance of their participation in school life • explore cultures through a variety of community activities • celebrate cultural diversity by sharing family traditions, recipes, stories, language, arts • support families and schools in promoting multicultural learning outside the classroom • encourage parents and families to volunteer in the school • share materials with parents through lending libraries, parent bulletin boards, informational meetings, newsletters in the home language • create safe settings for parents to discuss issues carefully • select a Community Outreach Specialist who is respected by both the school and community with strong ties to the community	School-family study teams, advisory groups, planning sessions or review committees seek out/develop materials, practices, and programs which: • create a learning environment conducive to learning, and provide for individualization • build self-esteem • provide cooperative learning activities, hands-on learning experiences and visual models • celebrate and nurture the cultural strengths of all people • represent diverse ethnic, racial and cultural backgrounds • foster open discussion • incorporate family involvement such as friendship and family books, field trips, guest visitors • display representations of people from diverse backgrounds in successful modern-day roles • use authentic assessments	Collaborative partnerships build understanding among different cultures and community advocacy through: • cross-cultural committees/boards on governance, special cultural celebrations, or anti-bias curricula • commitment to a common goal • development of multicultural guidelines, policies and professional development that promote equity, cultural enrichment and sensitivity to differences • planning, monitoring and sustaining community and district support • using effective channels of communication within the community (radio, community centers, churches, bulletin boards in local businesses)

Possible Indicators:

1. Tracking of cultural/ethnic/language groups
2. Attendance and graduation rates
3. Types of School-Family-Community partnerships
4. Review board to assure curricular resources are free from gender, racial, ethnic or other biases
5. Professional development opportunities for increasing cultural awareness
6. Administrative support for professional development, training materials, parent programs
7. Needs sensing conducted through planning meetings, surveys, phone interviews, or neighborhood meetings
8. Participation in school-wide events, conferences, parent meetings and in extra-curricular student activities

9. Multicultural policies/guidelines
10. Positive student self-esteem, pride, confidence in personal capabilities
11. School-family newsletters, parent handbooks, invitations are printed in home languages
12. Criterion-referenced/ authentic assessments/ portfolios

Guiding Questions in Using Information from Indicators:

A. What roles do parent-school-community partnerships play?
B. How is the curriculum reviewed to insure cultural sensitivity?
C. Are language barriers reduced by translating written communications, using school interpreters?
D. Is professional development time dedicated to culturally related topics?...are specialists brought in? ..are local experts used?
E. Do the staff avoid practices which are known to be detrimental to intergroup relations such as academic tracking, and communicating differential expectations of students based on gender/cultural/language group?
F. Is there a Community Outreach Specialist?...Parent Volunteer Coordinator?
G. Are multicultural activities fully integrated into the curriculum -- not just a sporadic add-on ?
H. Are cultural activities integrated into children's' school experience from the time they begin school?
I. Are efforts aimed at parents of children at each stage of school?
J. Do special programs target middle-schoolers as they make key life choices?
K. Are culturally significant resources used such as native songs to develop beginning reading skills and oral language?
L. How does the school vigorously reach out to parents, families and community members from diverse cultures?
M. How much does the staff understand about the cultural norms and values of children from diverse groups?

Citations:

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